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Technology

# FACTS AND FIGURES

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OF THE  
AUTOMOBILE  
INDUSTRY

NATIONAL AUTOMOBILE  
CHAMBER OF COMMERCE

1932 EDITION

FACTS AND FIGURES

Tech Reg-  
National Automobile Chamber of Commerce

# FACTS AND FIGURES *of the* AUTOMOBILE INDUSTRY 1932 EDITION

(*Figures for Calendar Year 1931*)

**T**HE replacement market again proved to be the Atlas supporting motor sales. In fact it absorbed the entire output for domestic consumption in nineteen hundred and thirty-one.

This, the fourteenth edition of "Facts and Figures," presents for ready reference new data on raw material purchases by the motor industry, automotive employment by states, farm use of motor vehicles, highway development and financing, analysis of retail markets, taxation, registrations, production, motor truck use, automotive shipments on railroads and facts on the foreign market.

The National Automobile Chamber of Commerce which publishes this booklet is the trade association of car and truck manufacturers. Its purpose is to serve the cause of motor transportation. Its activities include the cross-licensing of more than 1700 patents which has resulted in the production of better vehicles and reduced manufacturing costs, with resulting savings to the public.

It fosters the distribution and use of motor vehicles and participates in all motor transport matters where cooperative effort is efficient, economical, and to the advantage of the public and of the industry.

With its predecessors, it has represented the automobile industry for thirty-one years.

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Extracts from this book may be used with or without credit.

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## NATIONAL AUTOMOBILE CHAMBER OF COMMERCE MARLIN-ROCKWELL BUILDING

366 Madison Avenue, at 46th Street, New York City

Detroit  
General Motors Bldg.

Paris  
68 Quai d'Auteuil

Washington, D. C.  
Transportation Bldg.

Cable Address: Nautomerce

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*Tech Rep-*

# National Automobile Chamber of Commerce

MARLIN-ROCKWELL BLDG., 366 MADISON AVE., AT 46TH ST., NEW YORK CITY, U. S. A.

Washington, D. C.  
Transportation Building

Paris  
68 Quai d'Auteuil

Detroit, Mich.  
General Motors Building

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## OFFICERS

<i>President</i> .....	ALVAN MACAULEY.....	Packard Motor Car Company
<i>First Vice-President</i> .....	ALFRED H. SWAYNE.....	General Motors Corporation
<i>Vice-President</i> .....	A. R. ERSKINE.....	The Studebaker Corporation
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<i>Vice-President</i> .....	A. J. BROSEAU.....	Mack Bros. Motor Car Company
Commercial Car Division		
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<i>Secretary</i> .....	CHARLES W. NASH.....	The Nash Motors Company
<i>Treasurer</i> .....	F. J. HAYNES.....	Detroit, Michigan

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*Vice-President and General Manager*.....ALFRED REEVES  
*Assistant General Manager*.....JAMES S. MARVIN

(A list of committees is given on pages 88-90)



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1931 1932 c.1

**1931**  
*in the*  
**Automobile Industry**

*cr*

**Production (United States and Canada)..... 2,472,359**

Passenger cars, 2,038,183      Trucks... 434,176

**Wholesale Value, Motor Vehicles, Parts  
and Tires..... \$2,159,424,252**

Cars (United States and Canada) .. \$1,153,907,947

Trucks (United States and Canada) 272,748,305

Parts sold by motor vehicle manu-  
facturers..... 203,404,000

Replacement parts, accessories and  
tires..... 529,364,000

**Foreign Sales of American Motor Vehicles..... 324,178**

**Registration (United States)..... 25,814,103**

Cars.....23,059,262      Trucks.. 3,486,019

**Motor Vehicle Manufacturing Business in  
United States**

Capital invested (net tangible assets) \$1,637,907,454

Number of stockholders: Common,  
671,311—Preferred, 32,057

Number employed, motor vehicle  
factories..... 270,464

Wages and salaries..... 397,207,034

Number employed directly and in-  
directly..... 4,030,000

**Number of Motor Vehicle Dealers in United  
States..... 48,060**

# Production\* and Wholesale Value

	PASSENGER CARS		MOTOR TRUCKS		TOTAL CARS AND TRUCKS	
	Number	Value	Number	Value	Number	Value
\$1900..	4,192	\$4,899,443	.....	.....	4,192	\$4,899,443
1901..	7,000	8,183,000	.....	.....	7,000	8,183,000
1902..	9,000	10,395,000	.....	.....	9,000	10,395,000
1903..	11,235	13,000,000	.....	.....	11,235	13,000,000
\$1904..	22,419	23,682,492	411	\$946,947	22,830	24,629,439
1905..	24,550	39,030,000	450	970,000	25,000	40,000,000
1906..	33,500	61,850,000	500	1,050,000	34,000	62,900,000
1907..	43,300	92,040,000	700	1,360,000	44,000	93,400,000
1908..	63,500	135,250,000	1,500	2,550,000	65,000	137,800,000
\$1909..	127,731	159,918,506	3,255	5,230,023	130,986	165,148,529
1910..	181,000	215,340,000	6,000	9,660,000	187,000	225,000,000
1911..	199,319	225,000,000	10,681	21,000,000	210,000	246,000,000
1912..	356,000	335,000,000	22,000	43,000,000	378,000	378,000,000
1913..	461,500	399,902,000	23,500	44,000,000	485,000	443,902,000
\$1914..	543,679	413,859,379	25,375	45,098,464	569,054	458,957,843
1915..	895,930	575,978,000	74,000	125,800,000	969,930	701,778,000
1916..	1,525,578	921,378,000	92,130	161,000,000	1,617,708	1,082,378,000
1917..	1,745,792	1,053,505,781	128,157	220,982,668	1,873,949	1,274,488,449
1918..	943,436	801,937,925	227,250	434,168,992	1,170,686	1,236,106,917
1919..	1,657,652	1,461,785,925	275,943	423,326,621	1,933,595	1,885,112,546
1920..	1,905,560	1,809,170,963	321,789	423,249,410	2,227,349	2,232,420,373
†1921..	1,518,061	1,091,752,452	164,304	169,914,098	1,682,365	1,261,666,550
†1922..	2,369,089	1,561,740,645	277,140	231,282,063	2,646,229	1,793,022,708
†1923..	3,753,945	2,274,554,488	426,505	317,478,940	4,180,450	2,592,033,428
†1924..	3,303,646	2,040,706,519	434,140	326,706,496	3,737,786	2,367,413,015
†1925..	3,870,744	2,544,528,799	557,056	470,634,763	4,427,800	3,015,163,562
†1926..	3,948,843	2,746,064,722	556,818	468,752,769	4,505,661	3,214,817,491
†1927..	3,083,360	2,265,633,102	497,020	435,072,641	3,580,380	2,700,705,743
†1928..	4,012,158	2,703,753,500	588,983	459,045,380	4,601,141	3,162,798,880
†1929..	4,794,898	2,981,141,842	826,817	595,504,039	5,621,715	3,576,645,881
†1930..	2,910,187	1,720,652,104	599,991	405,949,915	3,510,178	2,126,602,019
†1931..	2,038,183	1,153,907,947	434,176	272,748,305	2,472,359	1,426,656,252

\*Figures for 1921 to date are "factory sales" for U. S. plants and "production" for Canadian plants. Foreign assemblies of parts made in U. S. but assembled abroad are included in this table as well as in the monthly figures compiled by the U. S. Census Bureau.

†From United States Census reports. 1900 for fiscal year ended June 30, 1900.

‡Figures include production of plants located in Canada. See page 5 for Canadian production and wholesale value.

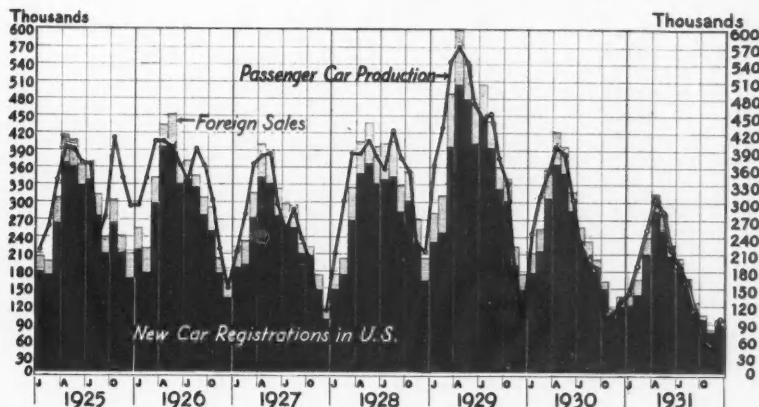
## Annual Percentage Increase in Production

(United States and Canada)

Year	Passenger Cars	Motor Trucks	Total	Year	Passenger Cars	Motor Trucks	Total
1910..	41.7%	84.3%	42.7%	1921..	-19.7%	-52.3%	-24.4%
1911..	10.1%	78.0%	12.2%	1922..	55.0%	81.0%	57.2%
1912..	78.6%	105.9%	80.0%	1923..	58.4%	54.0%	57.9%
1913..	29.6%	6.8%	28.3%	1924..	-12.0%	1.8%	-8.1%
1914..	17.8%	7.9%	17.3%	1925..	17.2%	28.5%	18.4%
1915..	64.7%	191.6%	70.2%	1926..	2.0%	-0.2%	1.7%
1916..	70.2%	24.5%	66.7%	1927..	-22.0%	-10.6%	-20.5%
1917..	14.4%	39.1%	15.8%	1928..	30.0%	18.5%	28.6%
1918..	-46.0%	77.3%	-37.5%	1929..	19.5%	40.5%	22.0%
1919..	75.7%	21.4%	65.0%	1930..	-39.3%	-27.5%	-37.5%
1920..	15.0%	16.6%	15.1%	1931..	-30.0%	-27.6%	-29.6%

(-) means decrease.

## Passenger Car Output Adjusted to Domestic and Foreign Sales



Production curve includes United States and Canadian output. Monthly vertical bars represent new car registration in United States and foreign sales (cross-hatched top portion). Foreign sales include exports from United States, foreign assemblies and Canadian production.

## Number and Wholesale Value of Canadian Production<sup>1</sup> 1921—1931

(Figures from Annual Report of Dominion Bureau of Statistics, Ottawa, Canada)

Year	PASSENGER CARS		TRUCKS		TOTAL	
	Number	Value	Number	Value	Number	Value
1921....	61,098	\$53,561,415	5,148	\$3,843,288	66,246	\$57,404,703
1922....	92,838	67,226,654	8,169	5,232,405	101,007	72,459,059
1923....	127,976	78,282,372	19,226	8,941,011	147,202	87,223,383
1924....	114,537	70,609,960	18,043	8,125,916	132,580	78,735,876
1925....	135,573	86,158,773	26,397	12,234,486	161,970	98,393,259
1926....	166,887	106,000,203	37,840	16,629,334	204,727	122,629,537
1927....	146,421	100,962,211	32,633	14,942,017	179,054	115,904,228
1928....	197,848	127,263,877	44,206	21,913,122	242,054	149,176,999
1929....	203,307	134,023,280	59,318	29,474,395	262,625	163,497,675
1930....	121,337	75,253,581	32,035	16,513,225	153,372	91,766,806
1931....	65,093	*43,539,498	17,528	*9,676,771	82,621	*53,216,269

\*Estimated by National Automobile Chamber of Commerce.

<sup>1</sup>—Production figures appearing in the Annual Report of the Dominion Bureau of Statistics differ slightly from the monthly figures compiled by the same Bureau. The monthly figures have been used in the tables on pages 7, 10 and 66.

# Monthly Motor Vehicle Production

## United States and Canada

(Figures from U. S. Census Bureau, and Dominion Bureau of Statistics)

### Passenger Car Production

Year	1925	1926	1927	1928	1929	1930	1931
Jan....	217,825	287,900	209,902	212,244	364,773	242,672	142,869
Feb....	257,330	337,900	277,376	301,320	431,755	293,036	187,948
Mar....	339,142	402,568	363,595	386,510	546,489	348,087	241,727
April..	397,915	403,271	377,713	384,778	571,956	393,804	300,960
May....	388,819	396,218	378,921	404,444	541,310	382,619	282,096
June....	369,955	359,534	296,035	381,026	469,260	298,130	215,979
July....	364,109	330,007	246,530	357,682	439,598	230,761	187,324
Aug....	229,278	393,823	285,724	422,996	452,857	190,864	158,851
Sept....	275,973	365,553	235,124	374,276	375,046	182,049	111,336
Oct....	405,132	300,854	189,278	351,899	328,305	117,014	59,176
Nov....	337,750	227,131	114,885	223,896	176,629	104,668	49,996
Dec....	287,516	144,084	108,277	211,087	96,920	126,483	99,921
Total..	3,870,744	3,948,843	3,083,360	4,012,158	4,794,898	2,910,187	2,038,183

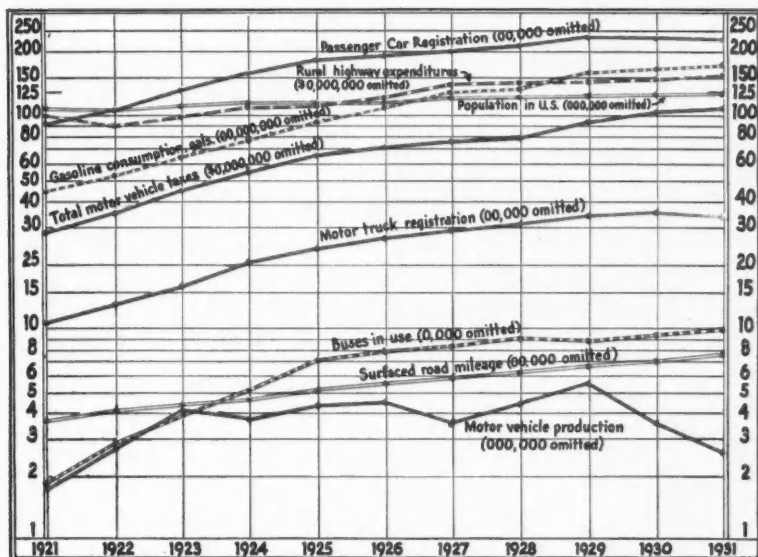
### Motor Truck Production

Year	1925	1926	1927	1928	1929	1930	1931
Jan....	33,422	36,577	44,382	27,947	57,765	40,938	35,475
Feb....	38,828	44,590	46,014	34,980	65,950	52,925	41,863
Mar....	51,105	53,273	54,168	44,273	79,587	69,031	47,671
April..	54,936	57,567	53,280	49,537	91,855	74,477	53,138
May....	50,376	53,883	52,435	55,281	94,940	62,080	47,805
June....	43,989	48,486	46,990	44,169	98,164	51,466	41,496
July....	46,878	44,811	33,853	59,630	78,703	44,960	35,386
Aug....	39,921	48,313	36,796	69,547	59,985	43,296	32,890
Sept....	62,559	50,880	36,448	62,231	54,683	46,557	31,876
Oct....	51,962	48,237	38,152	63,921	66,235	41,928	22,406
Nov....	45,271	38,998	26,102	45,013	50,368	37,493	20,118
Dec....	37,809	31,203	28,400	32,454	28,582	34,840	24,052
Total..	557,056	556,818	497,020	588,983	826,817	599,991	434,176

### Passenger Car and Truck Production

Year	1925	1926	1927	1928	1929	1930	1931
Jan....	251,247	324,477	254,284	240,191	422,538	283,610	178,344
Feb....	296,158	382,490	323,390	336,300	497,705	345,961	229,811
Mar....	390,247	455,841	417,763	430,783	626,076	417,118	289,398
Apr....	452,851	460,838	430,993	434,315	663,811	468,281	354,098
May....	439,195	450,101	431,356	459,725	636,250	444,699	329,901
June....	413,944	408,020	343,025	425,195	567,424	349,596	257,475
July....	410,987	374,818	280,383	417,312	518,301	275,721	222,710
Aug....	269,199	442,136	322,520	492,543	512,842	234,160	191,741
Sept....	338,532	416,433	271,572	436,507	429,729	228,606	143,212
Oct....	457,094	349,091	227,430	415,820	394,540	158,942	81,582
Nov....	383,021	266,129	140,987	268,909	226,997	142,161	70,114
Dec....	325,325	175,287	136,677	243,541	125,502	161,323	123,973
Total..	4,427,800	4,505,661	3,580,380	4,601,141	5,621,715	3,510,178	2,472,359

# Motor Transportation Progress



## Wholesale Value of All Automotive Products

United States and Canada

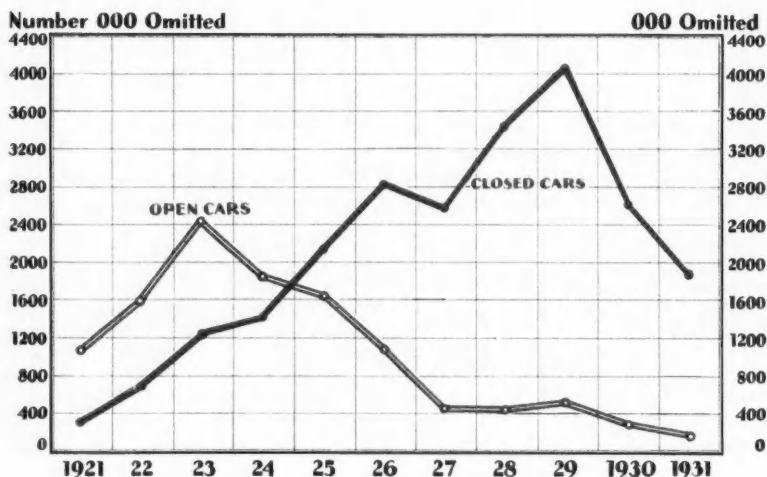
Year	Wholesale Value	Year	Wholesale Value
1924.....	\$2,928,280,004	1928.....	\$4,405,847,880
1925.....	3,901,344,833	1929.....	4,796,295,881
1926.....	4,388,693,676	1930.....	3,068,410,145
1927.....	3,931,705,743	1931.....	2,159,424,252

## Monthly Canadian Production

(Figures from Dominion Bureau of Statistics)

	Cars		Trucks		Total	
	1930	1931	1930	1931	1930	1931
January.....	8,856	4,552	1,532	1,944	10,388	6,496
February.....	13,021	7,529	2,527	2,342	15,548	9,871
March.....	17,165	10,483	3,565	2,510	20,730	12,993
April.....	20,872	14,043	3,385	3,116	24,257	17,159
May.....	21,251	10,621	3,421	2,117	24,672	12,738
June.....	12,194	5,583	2,896	1,252	15,090	6,835
July.....	8,556	3,151	1,632	1,069	10,188	4,220
August.....	6,946	3,426	2,846	1,118	9,792	4,544
September.....	5,623	2,108	2,334	538	7,957	2,646
October.....	3,206	761	1,335	679	4,541	1,440
November.....	3,527	812	1,880	435	5,407	1,247
December.....	4,225	2,024	1,397	408	5,622	2,432
<b>Total.....</b>	<b>125,442</b>	<b>65,093</b>	<b>28,750</b>	<b>17,528</b>	<b>154,192</b>	<b>82,621</b>

# Production of Open and Closed Cars



## Number and Percentage of Closed Cars, 1919-1931 United States and Canada

Year	Open	Closed	% Closed	Year	Open	Closed	% Closed
1919*	1,496,652	161,000	10.3%	1926...	1,105,505	2,843,338	72.0%
1920*	1,581,610	323,950	17.0%	1927...	466,238	2,617,122	84.9%
1921...	1,182,576	335,485	22.1%	1928...	460,128	3,552,030	88.5%
1922...	1,654,909	714,180	30.0%	1929...	510,409	4,284,489	89.4%
1923...	2,477,635	1,276,310	34.0%	1930...	282,729	2,627,458	90.4%
1924...	1,883,280	1,420,366	43.0%	1931...	144,270	1,894,513	92.9%
1925...	1,684,106	2,186,638	56.5%				

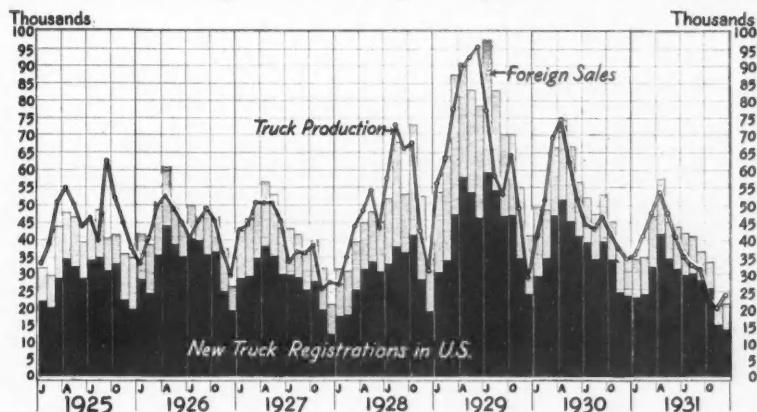
\*United States only.

## Passenger Car Production by Body Types

### United States and Canada

	1929		1930		1931	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
Touring.....	178,782	3.7	77,948	2.7	33,151	1.63
Roadster.....	322,502	6.7	202,081	6.9	111,119	5.45
Coupe.....	994,311	20.7	700,827	24.1	504,447	24.76
2-door Sedan.....	1,344,604	28.0	782,276	26.9	524,050	25.70
4-door Sedan.....					784,873	38.50
All other closed cars....	1,868,274	39.1	1,119,116	38.4	65,804	3.23
Chassis.....	86,425	1.8	27,939	1.0	14,739	.73
Total.....	4,794,898	100%	2,910,187	100%	2,038,783	100%

# Truck Output Closely Adjusted to Sales



Truck production curve includes output in United States, Canada and foreign assembly plants. Foreign sales include exports from United States, Canadian production and foreign assemblies. New registrations in United States are from R. L. Polk and Company.

## Truck Production by Capacities

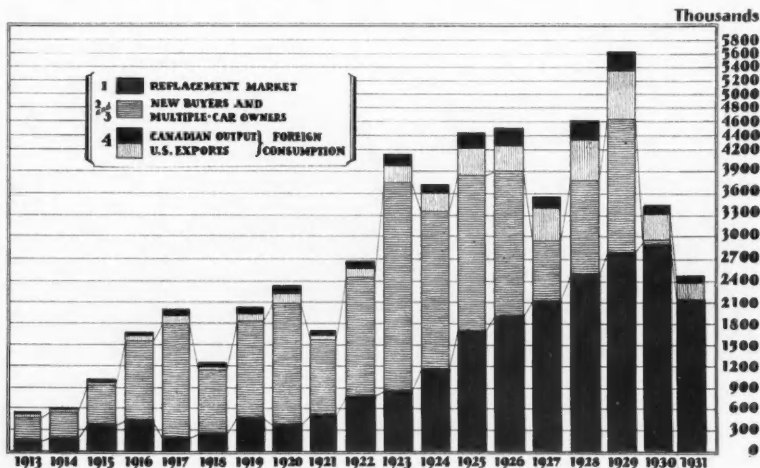
### UNITED STATES AND CANADA

	1925	1926	1927	1928	1929	1930	1931
¾ ton or less . . . . .	81,567	99,286	88,046	95,232	141,859	144,869	109,220
1 ton and less than 1½ . . . . .	391,165	347,167	319,637	313,270	78,786	31,028	4,899
1½ ton and less than 2 . . . . .	29,401	47,000	29,107	112,171	523,691	370,541	289,418
2 ton and less than 2½ . . . . .	12,456	19,993	27,313	30,456	28,416	16,477	8,516
2½ ton, less than 3½ . . . . .	16,691	18,231	16,584	21,813	33,530	22,887	11,516
3½ ton and less than 5 . . . . .	6,191	5,514	4,471	4,746	8,643	6,412	4,532
5 ton . . . . .	7,990	9,030	4,128	2,219	2,384	1,094	906
Over 5 ton & spec'l types . . . . .	11,595	10,597	7,734	9,076	9,508	6,683	5,169
<b>Total . . . . .</b>	<b>557,056</b>	<b>556,818</b>	<b>497,020</b>	<b>588,983</b>	<b>826,817</b>	<b>599,991</b>	<b>434,176</b>

## Truck Production by Capacities—Per Cent

	1925	1926	1927	1928	1929	1930	1931
¾ ton or less . . . . .	14.7	17.8	17.7	16.2	17.1	24.0	25.2
1 ton and less than 1½ . . . . .	70.2	62.4	64.3	53.2	9.5	5.2	1.1
1½ ton and less than 2 . . . . .	5.3	8.4	5.9	19.0	63.4	61.7	66.6
2 ton and less than 2½ . . . . .	2.2	3.6	5.5	5.2	3.4	2.7	2.0
2½ ton and less than 3½ . . . . .	3.0	3.3	3.3	3.7	4.1	3.8	2.7
3½ ton and less than 5 . . . . .	1.1	1.0	.9	.8	1.0	1.0	1.0
5 ton . . . . .	1.4	1.6	.8	.4	.3	.2	.2
Over 5 ton & spec'l types . . . . .	2.1	1.9	1.6	1.5	1.2	1.4	1.2
<b>Total . . . . .</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

# 1931 U. S. Replacements Take 87% of Output



## Automobile Markets

(Figures include all Motor Vehicles)

### FOREIGN MARKET

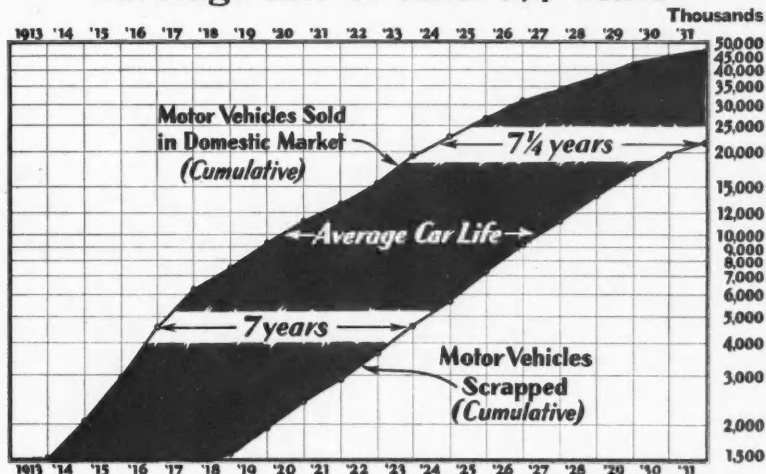
### DOMESTIC MARKET

Year	Production U. S. and Canada	Canadian Output	U. S. Exports†	Total Foreign	New and Multiple Car Buyers	Replacements	Total Domestic
1913...	503,000	18,000	26,889	44,889	340,687	117,424	458,111
1914...	589,054	20,000	25,765	45,765	412,202	131,087	543,289
1915...	999,930	30,000	63,958	93,958	584,557	321,415	905,972
1916...	1,669,708	52,000	80,843	132,843	1,139,659	397,206	1,536,865
1917...	1,967,759	93,810	80,235	174,045	1,651,871	141,843	1,793,714
1918...	1,253,094	82,408	47,244	129,652	927,247	196,195	1,123,442
1919...	2,021,430	87,835	82,730	170,565	1,442,455	408,410	1,850,865
1920...	2,321,493	94,144	177,111	271,255	1,696,299	353,939	2,050,238
1921...	1,682,365	66,246	63,619	129,865	1,069,771	482,829	1,552,500
1922...	2,646,229	102,053	130,899	232,952	1,618,321	794,956	2,413,277
1923...	4,180,450	146,438	235,183	381,621	2,921,686	877,143	3,798,829
1924...	3,737,786	135,246	293,149	428,395	2,158,010	1,151,381	3,309,391
1925...	4,427,800	161,970	428,687	590,657	2,166,806	1,670,337	3,837,143
1926...	4,505,661	204,727	393,444	598,171	2,083,260	1,824,230	3,907,490
1927...	3,580,380	179,054	469,468	648,522	821,644	2,110,214	2,931,858
1928...	4,601,141	242,382	582,764	825,146	1,159,127	2,516,868	3,775,995
1929...	5,621,715	263,295	734,211	997,506	1,851,371	2,772,838	4,624,209
1930...	3,510,178	154,192	405,715	559,907	56,653	2,893,618	2,950,271
1931...	2,472,359	82,621	241,557	324,178	0	2,148,181	2,148,181

†Slight difference between export and domestic market figures in this table and those in table on replacements is due to imports.



# Average Life of Cars 7¼ Years



## 1931 U. S. Replacements 2,148,000

Year	U. S. Production	U. S. Net Exports	U. S. Domestic Market	U. S. Registration	Unadjusted Scrapped	Total Scrapped or Replacements
1913	485,000	26,397	458,603	1,258,062	144,541	117,424
1914	569,054	25,469	543,585	1,711,339	90,308	131,087
1915	969,930	63,737	906,193	2,445,666	171,866	321,415
1916	1,617,708	79,414	1,538,294	3,512,996	470,964	397,206
1917	1,873,949	80,157	1,793,792	4,983,340	323,448	141,843
1918	1,170,686	47,171	1,123,515	6,146,617	39,762	196,195
1919	1,933,595	82,613	1,850,982	7,565,446	432,153	408,410
1920	2,227,349	176,185	2,051,164	9,231,941	384,669	353,939
1921	1,616,119	60,135	1,555,984	10,464,715	323,210	482,829
1922	2,544,176	126,589	2,417,587	12,239,853	642,449	794,956
1923	4,034,012	234,224	3,799,788	15,092,177	947,464	877,143
1924	3,602,540	292,522	3,310,018	17,595,373	806,822	1,151,381
1925	4,265,830	427,989	3,837,841	19,937,274	1,495,940	1,670,337
1926	4,300,934	392,080	3,908,854	22,001,393	1,844,735	1,824,230
1927	3,401,326	465,749	2,935,577	23,133,243	1,803,727	2,110,214
1928	4,358,748	582,165	3,776,583	24,493,124	2,416,702	2,516,868
1929	5,358,420	733,066	4,625,354	26,501,443	2,617,035	2,772,838
1930	3,355,986	405,006	2,950,980	26,545,281	2,907,142	*2,893,618
1931	2,389,738	240,821	2,148,917	25,814,103	2,880,095	*2,148,181

\*Some of these motor vehicles may not have been actually scrapped but kept in storage.

Sample computation of replacements for 1926: Add 1926 cars going into the domestic market, 3,908,854, to the 1925 registration of 19,937,274. Subtract from this sum the 1926 registration of 22,001,393 leaving 1,844,735. This is called the unadjusted figure for replacements.

Due to the fact that in about one-half of the states the law permits the transfer of the license on the scrapped car to the same registrant's new car and in the remaining states the license is discarded with the old car, and due to other owners' practices as well, it has been assumed that one-half of the cars represented by the "unadjusted" figure (1,844,735) were scrapped in that same year (1926) and the other half scrapped in the preceding year (1925).

By adding half of the "unadjusted" figure for 1927 to half of 1926 "unadjusted" figure, a total of 1,824,230 is obtained as representing the 1926 replacements.

# New Motor Vehicle Registrations

(Figures from R. L. Polk & Company)

## New Passenger Car Registrations in U. S.

	1926	1927	1928	1929	1930	1931
January.....	193,748	174,638	136,071	219,760	180,094	126,776
February.....	162,907	179,920	165,537	235,590	211,645	134,133
March.....	276,619	260,134	254,214	377,802	298,824	200,841
April.....	388,024	329,687	332,056	481,675	357,064	265,732
May.....	396,504	317,932	351,459	454,132	345,031	247,727
June.....	319,788	268,066	317,069	386,398	260,861	201,911
July.....	360,700	250,315	324,120	432,503	254,098	194,322
August.....	306,790	245,961	329,674	376,886	203,737	155,744
September.....	267,471	187,678	271,821	304,452	175,286	124,903
October.....	241,094	185,383	284,939	288,697	150,219	102,659
November.....	161,013	134,635	211,736	183,756	93,066	75,829
December.....	153,743	89,189	160,883	138,555	96,054	77,564
<b>Total.....</b>	<b>3,228,401</b>	<b>2,623,538</b>	<b>3,139,579</b>	<b>3,880,206</b>	<b>2,625,979</b>	<b>1,908,141</b>

## New Truck Registrations in U. S.

	1926	1927	1928	1929	1930	1931
January.....	25,048	27,567	16,431	29,900	30,236	24,415
February.....	23,177	28,437	17,510	32,637	31,880	23,466
March.....	34,955	33,539	24,698	46,368	42,199	30,609
April.....	44,846	37,264	30,272	56,299	47,029	36,848
May.....	37,761	33,966	32,468	52,874	43,286	33,496
June.....	33,223	28,495	29,155	45,114	33,531	28,496
July.....	39,191	28,359	31,844	57,943	39,904	30,102
August.....	36,653	28,156	36,753	52,557	33,787	27,070
September.....	34,325	24,436	35,135	46,560	33,933	25,967
October.....	35,034	27,231	40,890	49,899	34,237	24,685
November.....	23,667	18,834	27,491	33,631	22,012	15,553
December.....	18,117	11,681	18,476	23,275	18,665	13,177
<b>Total.....</b>	<b>385,997</b>	<b>327,965</b>	<b>341,123</b>	<b>527,057</b>	<b>410,699</b>	<b>313,884</b>

## Total New Passenger Car and Truck Registrations

	1926	1927	1928	1929	1930	1931
January.....	218,796	202,205	152,502	249,660	210,330	151,191
February.....	186,084	208,357	183,047	268,227	243,525	157,599
March.....	311,574	293,673	278,912	424,170	341,023	231,450
April.....	432,870	366,951	362,328	537,974	404,093	302,580
May.....	434,265	351,898	383,927	507,006	388,317	281,223
June.....	353,011	296,561	346,224	431,512	294,392	230,407
July.....	399,891	278,674	355,964	490,446	294,002	224,424
August.....	343,443	274,117	366,427	429,443	237,524	182,814
September.....	301,796	212,114	306,956	351,012	209,219	150,870
October.....	276,128	212,614	325,829	338,596	184,456	127,344
November.....	184,680	153,469	239,227	217,387	115,078	91,382
December.....	171,860	100,870	179,359	161,830	114,719	90,741
<b>Total.....</b>	<b>3,614,398</b>	<b>2,951,503</b>	<b>3,480,702</b>	<b>4,407,263</b>	<b>3,036,678</b>	<b>2,222,025</b>

# Standing of States in Registrations, 1931

MOTOR VEHICLE REGISTRATION	NUMERICAL INCREASE OVER 1930	PER CENT INCREASE OVER 1930	POPULATION PER MOTOR VEHICLE
1 N. Y. .... 2,297,249	1 N. J. .... 17,017	1 D. of C. .... 10.8	1 Calif. .... 2.77
2 Calif. .... 2,043,281	2 D. of C. .... 16,843	2 Nev. .... 8.5	2 D. of C. .... 2.80
3 Pa. .... 1,741,942	3 Conn. .... 5,014	3 N. J. .... 2.0	3 Nev. .... 2.83
4 Ohio. .... 1,710,625	4 Ore. .... 4,600	4 Ore. .... 1.7	4 Iowa. .... 3.30
5 Ill. .... 1,612,770	5 Md. .... 3,670	5 Conn. .... 1.5	5 Neb. .... 3.31
6 Texas. .... 1,297,301	6 Va. .... 3,338	6 Maine. .... 1.1	6 Colo. .... 3.35
7 Mich. .... 1,230,980	7 Nev. .... 2,523	7 Md. .... 1.1	7 Kan. .... 3.36
8 N. J. .... 869,867	8 Maine. .... 2,081	8 R. I. .... 1.1	8 Ore. .... 3.42
9 Ind. .... 862,672	9 Calif. .... 1,925	9 Wyo. .... 1.0	9 Minn. .... 3.55
10 Mass. .... 840,190	10 R. I. .... 1,455	10 Va. .... 0.9	10 S. D. .... 3.58
11 Wis. .... 754,249	11 Wyo. .... 600	11 Calif. .... 0.1	11 Wyo. .... 3.63
12 Mo. .... 752,805	12 Colo. .... -51	12 Colo. .... -0.02	12 Wash. .... 3.71
13 Iowa. .... 748,438	13 N. H. .... -673	13 N. Y. .... -0.5	13 Ind. .... 3.75
14 Minn. .... 720,401	14 Del. .... -907	14 N. H. .... -0.6	14 Ohio. .... 3.88
15 Kan. .... 559,176	15 Vt. .... -2,747	15 Mass. .... -0.7	15 Wis. .... 3.89
16 Okla. .... 482,725	16 N. M. .... -2,825	16 Pa. .... -0.7	16 Mich. .... 3.93
17 N. C. .... 428,737	17 Ky. .... -3,676	17 Ky. .... -1.1	17 N. D. .... 3.97
18 Wash. .... 420,878	18 Fla. .... -4,541	18 Mo. .... -1.2	18 Idaho. .... 3.98
19 Nebr. .... 416,131	19 Ariz. .... -4,953	19 Fla. .... -1.4	19 Ariz. .... 4.11
20 Va. .... 379,227	20 Utah. .... -5,039	20 Ind. .... -1.5	20 N. H. .... 4.17
21 Tenn. .... 350,520	21 Mass. .... -6,016	21 Del. .... -1.6	21 Mont. .... 4.22
22 Conn. .... 336,040	22 Idaho. .... -7,414	22 Ill. .... -1.6	22 Maine. .... 4.23
23 Ky. .... 327,326	23 Mont. .... -8,002	23 Minn. .... -1.7	23 Vt. .... 4.28
24 Md. .... 325,372	24 Mo. .... -8,795	24 Ohio. .... -2.3	24 Del. .... 4.31
25 Fla. .... 323,260	25 Nebr. .... -10,098	25 Nebr. .... -2.4	25 Texas. .... 4.48
26 Ga. .... 320,840	26 N. Y. .... -10,481	26 Vt. .... -3.2	26 Fla. .... 4.54
27 Colo. .... 308,458	27 Pa. .... -11,579	27 N. M. .... -3.4	27 N. J. .... 4.64
28 Ore. .... 278,225	28 N. D. .... -11,726	28 Wis. .... -3.6	28 Utah. .... 4.66
29 La. .... 263,050	29 S. D. .... -12,147	29 Iowa. .... -3.8	29 Ill. .... 4.73
30 W. Va. .... 253,308	30 La. .... -12,233	30 La. .... -4.4	30 Conn. .... 4.78
31 Ala. .... 246,465	31 Minn. .... -12,571	31 Utah. .... -4.4	31 Mo. .... 4.82
32 S. C. .... 203,719	32 W. Va. .... -12,965	32 Ariz. .... -4.5	32 Okla. .... 4.95
33 S. D. .... 193,025	33 Ind. .... -13,091	33 Tenn. .... -4.8	33 R. I. .... 4.98
34 Maine. .... 188,238	34 S. C. .... -14,683	34 W. Va. .... -4.9	34 Md. .... 5.01
35 Miss. .... 183,650	35 Tenn. .... -17,739	35 Texas. .... -5.0	35 Mass. .... 5.05
36 Ark. .... 180,731	36 Ga. .... -20,740	36 N. C. .... -5.4	36 N. M. .... 5.20
37 D. of C. .... 173,519	37 N. C. .... -24,504	37 Wash. .... -5.6	37 N. Y. .... 5.47
38 N. D. .... 171,293	38 Wash. .... -25,184	38 Kansas. .... -5.9	38 Pa. .... 5.52
39 R. I. .... 137,878	39 Ill. .... -25,490	39 Mont. .... -5.9	39 Va. .... 6.38
40 Mont. .... 127,166	40 Wis. .... -28,313	40 S. D. .... -5.9	40 W. Va. .... 6.82
41 Idaho. .... 111,663	41 Iowa. .... -29,948	41 Ga. .... -6.1	41 N. C. .... 7.39
42 N. H. .... 111,510	42 Ala. .... -30,681	42 Idaho. .... -6.2	42 Tenn. .... 7.46
43 Utah. .... 108,958	43 Kan. .... -35,347	43 N. D. .... -6.4	43 Ky. .... 7.98
44 Ariz. .... 105,572	44 Ark. .... -39,473	44 S. C. .... -6.7	44 La. .... 7.98
45 Vt. .... 83,877	45 Ohio. .... -48,738	45 Mich. .... -7.3	45 S. C. .... 8.53
46 N. M. .... 81,325	46 Miss. .... -53,444	46 Ala. .... -11.1	46 Ga. .... 9.06
47 Wyo. .... 62,101	47 Okla. .... -67,606	47 Okla. .... -12.3	47 Ark. .... 10.26
48 Del. .... 55,202	48 Texas. .... -68,595	48 Ark. .... -17.9	48 Ala. .... 10.73
49 Nev. .... 32,168	49 Mich. .... -97,229	49 Miss. .... -22.5	49 Miss. .... 10.94
<b>Total. .... 25,814,103</b>	<b>Total. .... -731,178</b>	<b>Total. .... -2.8</b>	<b>Total per M.V. 4.75</b> <b>Per pass. car. 5.5</b>

# Motor Vehicle Registrations, 1895-1931

(Figures as of December 31st)

Years	PASSENGER CARS		MOTOR TRUCKS		TOTAL MOTOR VEHICLES	
	Number	% Increase	Number	% Increase	Number	% Increase
1895.....	4	....	.....	....	4	....
1896.....	16	....	.....	....	16	....
1897.....	90	....	.....	....	90	....
1898.....	800	....	.....	....	800	....
1899.....	3,200	....	.....	....	3,200	....
1900.....	8,000	....	.....	....	8,000	....
1901.....	14,800	85%	.....	....	14,800	85%
1902.....	23,000	55%	.....	....	23,000	55%
1903.....	32,920	43%	.....	....	32,920	43%
1904.....	54,590	66%	410	....	55,000	67%
1905.....	77,400	42%	600	46%	78,000	42%
1906.....	105,900	37%	1,100	83%	107,000	37%
1907.....	140,300	33%	1,700	55%	142,000	33%
1908.....	194,400	38%	3,100	82%	197,500	39%
1909.....	305,950	57%	6,050	95%	312,000	58%
1910.....	458,500	50%	10,000	65%	468,500	50%
1911.....	619,500	35%	20,000	100%	639,500	36%
1912.....	902,600	46%	41,400	107%	944,000	48%
1913.....	1,194,262	32%	63,800	54%	1,258,062	33%
1914.....	1,625,739	36%	85,600	34%	1,711,339	36%
1915.....	2,309,666	42%	136,000	59%	2,445,666	43%
1916.....	3,297,996	43%	215,000	58%	3,512,996	44%
1917.....	4,657,340	42%	326,000	52%	4,983,340	42%
1918.....	5,621,617	21%	525,000	61%	6,146,617	23%
1919.....	6,771,074	21%	794,372	51%	7,565,446	23%
1920.....	8,225,859	22%	1,006,082	27%	9,231,941	22%
1921.....	9,346,195	14%	1,117,100	11%	10,463,295	13%
1922.....	10,862,650	16%	1,375,725	23%	12,238,375	17%
1923.....	13,479,608	24%	1,612,569	17%	15,092,177	23%
1924.....	15,460,649	15%	2,134,724	32%	17,595,373	17%
1925.....	17,496,420	13%	2,440,854	14%	19,937,274	13%
1926.....	19,237,171	10%	2,764,222	13%	22,001,393	10%
1927.....	20,219,224	5%	2,914,019	5%	23,133,243	5%
1928.....	21,379,125	6%	3,113,999	7%	24,493,124	6%
1929.....	23,121,589	8%	3,379,854	8%	26,501,443	8%
1930.....	23,059,262	-1%	3,486,019	3%	26,545,281	.16%
1931.....	22,347,800	-3.1%	3,466,303	-.6%	25,814,103	-2.8%

## Tax-Exempt Official Cars Not Included in the Official Registrations

Year	U. S. Cars† State and Local		Total	Year	U. S. Cars† State and Local		Total
1926...	33,179	102,762	135,941	1929...	33,179	118,828	152,007
1927...	33,179	101,689	134,868	1930...	33,179	140,440	173,619
1928...	33,179	103,618	136,797	1931...	*29,154	143,096	172,250

\*From Government reports 1932.

†U. S. Budget Bureau figures.

# Total Motor Vehicle Registrations by States—1926-1931

(Figures from U. S. Bureau of Public Roads as of December 31st)

STATES	1926	1927	1928	1929	1930	1931
Alabama.....	225,930	243,539	269,519	285,533	277,146	246,465
Arizona.....	73,682	81,047	94,372	109,013	110,525	105,572
Arkansas.....	209,419	206,568	214,931	233,125	220,241	180,731
California.....	1,600,475	1,693,195	1,799,890	1,974,341	2,041,356	2,043,281
Colorado.....	248,613	268,492	284,867	305,489	308,509	308,458
Connecticut.....	263,235	281,521	309,792	328,063	331,026	336,040
Delaware.....	44,834	47,124	51,210	54,960	56,109	55,202
Dist. of Columbia.....	111,497	111,680	126,556	151,450	156,679	173,519
Florida.....	401,562	394,734	352,961	345,977	327,801	323,260
Georgia.....	277,468	300,635	318,856	358,905	341,580	320,840
Idaho.....	94,760	101,336	108,154	118,074	119,077	111,663
Illinois.....	1,370,503	1,438,985	1,504,359	1,615,088	1,638,260	1,612,770
Indiana.....	772,326	813,637	823,806	866,715	875,763	862,672
Iowa.....	698,998	704,203	733,466	784,450	778,386	748,438
Kansas.....	491,276	501,901	533,799	581,223	594,523	559,176
Kentucky.....	281,557	285,621	304,231	332,848	331,002	327,326
Louisiana.....	239,500	255,000	264,293	280,868	275,283	263,050
Maine.....	151,486	163,623	172,638	184,506	186,157	188,238
Maryland.....	252,852	276,863	285,311	319,873	321,702	325,372
Massachusetts.....	690,190	694,107	726,295	817,704	846,206	840,190
Michigan.....	1,118,785	1,154,773	1,249,221	1,395,102	1,328,209	1,230,980
Minnesota.....	630,285	646,682	673,573	730,399	732,972	720,401
Mississippi.....	205,200	218,043	246,242	250,011	237,084	183,650
Missouri.....	654,554	682,419	712,965	756,680	761,600	752,905
Montana.....	105,958	112,735	126,035	140,387	135,168	127,166
Nebraska.....	366,773	373,912	391,355	418,226	426,229	416,131
Nevada.....	24,014	25,776	27,376	31,915	29,645	32,168
New Hampshire.....	89,001	96,009	102,644	108,880	112,183	111,510
New Jersey.....	651,415	712,396	758,430	832,332	852,850	869,867
New Mexico.....	54,996	59,291	65,737	78,374	84,150	81,325
New York.....	1,815,434	1,937,918	2,083,942	2,263,259	2,307,730	2,297,249
North Carolina.....	385,047	430,499	464,376	483,602	453,241	428,737
North Dakota.....	157,822	160,701	173,525	188,046	183,019	171,293
Ohio.....	1,480,246	1,570,734	1,649,699	1,766,614	1,759,363	1,710,625
Oklahoma.....	499,938	503,126	529,843	570,791	550,331	482,725
Oregon.....	233,568	244,572	248,118	269,007	273,625	278,225
Pennsylvania.....	1,455,184	1,554,915	1,642,207	1,733,283	1,753,521	1,741,942
Rhode Island.....	110,746	118,014	125,698	134,009	136,423	137,878
South Carolina.....	181,189	199,635	216,805	231,274	218,402	203,719
South Dakota.....	168,230	169,552	191,374	204,199	205,172	193,025
Tennessee.....	279,639	294,567	322,137	362,431	368,259	350,520
Texas.....	1,049,869	1,111,407	1,214,297	1,348,107	1,365,896	1,297,301
Utah.....	85,380	93,974	98,541	112,661	113,997	108,958
Vermont.....	74,063	79,527	86,231	93,030	86,624	83,877
Virginia.....	322,614	337,607	360,545	387,205	375,889	379,227
Washington.....	363,279	384,583	402,875	442,341	446,062	420,878
West Virginia.....	227,836	245,819	251,556	268,888	266,273	253,308
Wisconsin.....	662,282	698,289	742,135	793,502	782,562	754,249
Wyoming.....	49,883	51,955	56,336	60,680	61,501	62,101
<b>Totals.....</b>	<b>22,001,393</b>	<b>23,133,241</b>	<b>24,493,124</b>	<b>26,501,443</b>	<b>26,545,281</b>	<b>25,814,103</b>



# Passenger Car Registrations by States—1926-1931

(Figures from U. S. Bureau of Public Roads as of December 31st)

STATES	1926	1927	1928	1929	1930	1931
Alabama.....	197,983	211,633	235,026	247,701	239,170	212,493
Arizona.....	63,294	68,597	86,036	98,327	98,480	92,939
Arkansas.....	179,480	174,524	181,280	193,396	193,218	149,456
California.....	*1,384,152	*1,479,411	1,582,477	1,760,308	1,810,969	1,798,068
Colorado.....	227,708	245,107	260,906	274,988	276,847	276,376
Connecticut....	222,283	238,509	261,091	278,057	279,830	284,081
Delaware.....	*36,246	38,037	41,195	44,728	45,533	*45,211
Dist. of Columbia	97,794	98,162	112,505	135,455	139,733	155,334
Florida.....	331,892	332,979	296,691	288,684	274,705	271,536
Georgia.....	241,949	262,630	277,881	310,362	294,461	274,576
Idaho.....	86,339	91,306	96,960	104,398	104,526	96,228
Illinois.....	1,195,897	*1,254,421	*1,314,003	*1,411,753	1,430,676	1,411,261
Indiana.....	665,126	697,359	706,713	741,366	747,366	732,846
Iowa.....	648,218	649,309	672,447	714,919	706,196	670,024
Kansas.....	*441,373	447,273	471,897	*507,529	*511,384	*478,692
Kentucky.....	252,632	255,892	272,636	298,716	295,161	292,357
Louisiana.....	204,000	216,000	223,445	234,565	230,586	215,267
Maine.....	124,158	132,927	139,460	147,962	148,722	149,467
Maryland.....	240,743	265,768	275,221	†281,034	283,870	289,292
Massachusetts..	593,234	614,359	637,153	719,436	743,288	736,302
Michigan.....	*669,686	*998,781	*1,084,615	*1,219,158	*1,161,051	*1,078,345
Minnesota.....	559,128	565,401	583,789	630,703	624,902	611,966
Mississippi.....	184,133	196,239	214,754	217,362	203,443	*152,929
Missouri.....	587,856	610,303	636,717	*671,237	*670,145	*656,830
Montana.....	88,840	94,733	104,231	115,285	109,549	*103,129
Nebraska.....	†337,989	†342,357	†358,173	375,946	367,587	356,283
Nevada.....	19,300	20,414	21,733	25,302	23,388	25,218
New Hampshire..	78,400	83,415	88,594	94,900	93,155	92,839
New Jersey.....	531,702	586,510	629,748	698,959	719,696	736,506
New Mexico.....	53,173	57,643	63,743	76,000	†70,450	65,441
New York.....	1,508,314	1,624,535	1,760,549	1,922,068	1,966,981	1,966,436
North Carolina..	352,217	390,223	418,864	430,651	397,133	374,162
North Dakota...	145,571	144,830	151,778	162,092	155,383	144,705
Ohio.....	1,295,020	1,374,402	1,450,994	1,560,182	1,555,093	*1,518,696
Oklahoma.....	449,955	437,776	465,550	510,401	490,947	428,140
Oregon.....	214,946	223,582	227,404	247,131	251,188	255,275
Pennsylvania...	1,264,453	1,354,548	1,420,957	1,515,875	1,534,834	1,522,130
Rhode Island...	91,798	98,861	106,155	114,010	116,792	118,313
South Carolina..	163,551	179,571	194,267	205,683	192,141	180,280
South Dakota...	153,840	153,019	171,067	*181,419	180,195	169,509
Tennessee.....	254,342	269,086	294,305	*329,697	330,436	316,544
Texas.....	944,905	996,397	1,060,028	1,165,150	1,159,139	1,086,310
Utah.....	72,880	80,730	84,220	95,661	96,128	91,381
Vermont.....	68,524	73,308	78,685	84,471	78,398	75,424
Virginia.....	273,764	288,666	306,911	328,525	318,582	322,594
Washington.....	310,386	326,667	344,977	379,995	382,874	360,796
West Virginia...	201,645	217,689	215,787	228,715	225,900	213,949
Wisconsin.....	581,994	609,795	646,747	689,447	677,452	640,476
Wyoming.....	44,358	45,539	48,760	51,880	51,579	51,388
<b>Totals.....</b>	<b>19,237,171</b>	<b>20,219,224</b>	<b>21,379,125</b>	<b>23,121,589</b>	<b>23,059,262</b>	<b>22,347,800</b>

†, ‡ See footnote under trucks.

\* Buses not included.

# Motor Truck

## Registration by States—1926-1931

(Figures from U. S. Bureau of Public Roads as of December 31st)

STATES	1926	1927	1928	1929	1930	1931
Alabama.....	27,947	31,906	34,493	37,832	37,976	33,972
Arizona.....	10,388	12,450	8,336	10,686	12,045	12,633
Arkansas.....	29,939	32,044	33,651	39,732	26,986	31,275
California.....	*216,323	*213,784	217,413	214,033	230,387	245,213
Colorado.....	20,905	23,385	23,961	28,501	31,662	32,082
Connecticut.....	40,952	43,012	48,701	50,006	51,196	51,959
Delaware.....	*8,588	9,087	10,015	10,232	10,576	*9,991
Dist. of Columbia	13,703	13,518	14,051	15,995	16,943	18,185
Florida.....	69,670	61,755	56,270	57,293	53,096	51,724
Georgia.....	35,519	38,005	40,975	48,543	47,119	46,264
Idaho.....	8,421	10,030	11,194	13,676	14,551	15,435
Illinois.....	174,606	*184,564	*190,356	*203,335	207,584	201,509
Indiana.....	107,200	116,278	117,093	125,349	128,397	129,826
Iowa.....	50,780	54,894	61,019	69,531	72,190	78,414
Kansas.....	*49,903	54,628	61,902	*73,694	*83,139	*80,484
Kentucky.....	28,925	29,729	31,595	34,132	35,841	34,969
Louisiana.....	35,500	39,000	40,848	46,303	44,697	47,783
Maine.....	27,328	30,696	33,178	36,544	37,435	38,771
Maryland.....	12,109	11,095	10,090	138,839	37,832	36,080
Massachusetts...	96,956	79,748	89,142	98,268	102,918	103,888
Michigan.....	*149,099	*155,992	*164,606	*175,944	*167,158	*152,635
Minnesota.....	71,157	81,281	89,784	99,696	108,070	108,435
Mississippi.....	21,067	21,804	31,488	32,649	33,651	*30,721
Missouri.....	66,698	72,116	76,248	*85,443	*91,455	*95,975
Montana.....	15,118	18,002	21,204	25,102	25,619	*24,037
Nebraska.....	*128,784	*131,555	133,182	42,280	58,642	59,848
Nevada.....	4,714	5,362	5,643	6,613	6,257	6,950
New Hampshire...	10,601	12,594	14,050	13,980	19,028	18,671
New Jersey.....	119,713	125,886	128,682	133,373	133,154	133,361
New Mexico.....	1,823	1,648	1,994	2,374	113,700	15,884
New York.....	307,120	313,383	323,393	341,191	340,749	330,813
North Carolina...	32,830	40,276	45,512	52,951	56,108	54,575
North Dakota...	12,251	15,871	21,747	25,954	27,636	26,588
Ohio.....	185,226	196,332	198,705	206,432	204,270	*191,929
Oklahoma.....	49,983	65,350	64,293	60,390	59,384	54,585
Oregon.....	18,622	20,990	20,714	21,876	22,437	22,950
Pennsylvania...	190,731	200,367	221,250	217,408	218,687	219,812
Rhode Island...	18,948	19,153	19,543	19,999	19,631	19,565
South Carolina...	17,638	20,064	22,538	25,591	26,261	23,439
South Dakota...	14,390	16,533	20,307	*22,780	24,977	23,516
Tennessee.....	25,297	25,481	27,832	*32,734	37,823	33,976
Texas.....	104,964	115,010	154,269	182,957	206,757	210,991
Utah.....	12,500	13,244	14,321	17,000	17,869	17,577
Vermont.....	5,539	6,219	7,546	8,559	8,226	8,453
Virginia.....	48,850	48,941	53,634	58,680	57,307	56,633
Washington.....	52,893	57,916	57,898	62,346	63,188	60,082
West Virginia...	26,191	28,130	35,769	40,173	40,373	39,359
Wisconsin.....	80,288	88,494	95,388	104,055	105,110	113,773
Wyoming.....	5,525	6,416	7,576	8,800	9,922	10,713
<b>Totals.....</b>	<b>2,764,222</b>	<b>2,914,019</b>	<b>3,113,999</b>	<b>3,379,854</b>	<b>3,486,019</b>	<b>3,466,303</b>

†Big increase due largely to reclassification of trucks which previously had been classed as passenger cars.

§Includes only trucks and buses weighing over 3,000 lbs.; others included under passenger cars.

†In 1928, 27,089 commercial cars with pneumatic tires were included under passenger cars, practically all of which were classed as trucks in 1929.

\*Includes Buses; other States include buses with passenger cars.

# City Registrations of

(Figures from Local Chambers of

City	Motor Cars	Motor Trucks	Taxis	Buses	Total M. V.	Area Sq. Mi.	Population
Akron, Ohio	58,716 <sup>a</sup>	6,517 <sup>a</sup>			65,233	53.0	255,000
Albany, N. Y.	37,942	7,618		682	46,242	19.3	127,412
Allentown, Pa.	15,782 <sup>a</sup>	3,240 <sup>a</sup>			19,022	10.2	92,563
Altoona, Pa.	11,104 <sup>a</sup>	1,995 <sup>a</sup>			13,099	8.8	82,054
Atlanta, Ga.	60,304	9,100	110	29	69,543	34.7	270,366
Baltimore, Md.	282,050	35,904	6,435	1,208	325,597	91.0	813,500
Bayonne, N. J.	8,035	1,540	18	142	9,735	4.5	88,979
Berkeley, Cal.	22,249 <sup>a</sup>				22,249	17.1	82,109
Bethlehem, Pa.	9,207 <sup>a</sup>	1,371 <sup>a</sup>			10,578	17.7	57,892
Binghamton, N. Y.	30,554	4,146			34,700	9.4	76,601
Birmingham, Ala.	34,738	5,208	167 <sup>a</sup>		40,113	50.3	259,678
Boston, Mass.	94,313 <sup>a</sup>	18,803 <sup>a</sup>			113,116	43.9	781,188
Bridgeport, Conn.	20,943	4,071	116	71	25,201	14.6	146,716
Buffalo, N. Y.	155,212	20,902		920	177,034	42.0	573,076
Cambridge, Mass.	14,846 <sup>a</sup>	2,567 <sup>a</sup>			17,413	6.0	113,643
Camden, N. J.	14,052	1,712	46	1,516	17,326	9.5	118,700
Canton, Ohio	22,496	3,000	16		25,512	13.6	105,524
Charlotte, N. C.	16,395	2,860			19,255		82,675
Chattanooga, Tenn.	23,740	2,810	275 <sup>a</sup>		26,825	27.3	119,798
Chicago, Ill.	423,786	56,629	4,600	550	485,565	210.7	3,475,000
Cincinnati, Ohio	116,678	16,337	346		133,361	72.0	451,160
Cleveland, Ohio	264,588	28,766 <sup>a</sup>	650		294,004	71.0	290,564
Columbus, Ohio	67,652	8,013 <sup>a</sup>	500		76,165	38.8	113,000
Dayton, Ohio	49,816 <sup>a</sup>				49,816	23.0	200,982
Denver, Colo.	80,807	5,466 <sup>a</sup>	110		86,383	58.7	287,861
Des Moines, Ia.	43,412	5,170	150	15	48,747	55.9	142,559
Detroit, Mich.	353,409 <sup>a</sup>	35,537 <sup>a</sup>			388,946	139.0	1,568,662
Duluth, Minn.	19,900	2,000	95	35	22,030	67.3	101,463
Elizabeth, N. J.	19,685	2,730	74	92	22,581	11.6	114,500
El Paso, Tex.	21,830	3,663		90	25,583	13.5	102,421
Erie, Pa.	23,623 <sup>a</sup>	2,927 <sup>a</sup>			26,550	20.5	115,967
Evansville, Ind.	15,077	2,965	46	19	17,558	22.6	102,249
Fall River, Mass.	11,337 <sup>a</sup>	1,993 <sup>a</sup>			13,330	33.0	115,274
Flint, Mich.	31,000	3,050		17	34,067	29.8	156,492
Fort Wayne, Ind.	21,000	4,000	40		25,040	16.4	114,000
Fort Worth, Tex.	47,136	7,778	75	30	55,019	58.0	175,000
Grand Rapids, Mich.	55,240	8,163	69	13	63,485	23.4	168,650
Harrisburg, Pa.	17,076 <sup>a</sup>	4,105 <sup>a</sup>			21,181	10.0	80,339
Hartford, Conn.	25,936	4,791	157	38	30,922	18.0	164,072
Houston, Tex.	82,351	13,132		50	95,533	40.5	232,352
Huntington, W. Va.	14,500 <sup>a</sup>		40	85	14,625	16.4	75,573
Indianapolis, Ind.	97,839	13,351	350	90	111,630	54.1	364,161
Jacksonville, Fla.	20,104	2,983	164	13	23,264	37.8	135,145
Jersey City, N. J.	26,790	5,620	64	248	32,722	19.0	316,000
Kansas City, Kans.	25,370	4,318	30	10	33,728	22.0	121,857
Kansas City, Mo.	80,701 <sup>a</sup>	11,690			92,391	59.0	408,900
Kenosha, Wis.	8,875 <sup>a</sup>			4	8,879	7.4	50,242
Knoxville, Tenn.	15,000	1,200	100	50	16,350	26.4	105,802
Lakewood, Ohio	20,821 <sup>a</sup>				20,821		70,717
Lansing, Mich.	30,052	3,337			33,389	11.5	78,425
Lawrence, Mass.	15,071 <sup>a</sup>	2,106 <sup>a</sup>			17,177	8.6	85,068
Lincoln, Neb.	28,000	3,000	65	30	31,095	24.4	79,592
Little Rock, Ark.	14,400	3,600	50	7	18,057	22.0	101,097
Los Angeles, Cal.	813,787	36,562	566	641	851,556	4,115.0	1,238,048
Louisville, Ky.	43,861	6,571	236		50,668	39.22	307,745
Lowell, Mass.	12,758 <sup>a</sup>	1,787 <sup>a</sup>			14,545	14.1	100,234
Lynn, Mass.	22,063 <sup>a</sup>	2,366 <sup>a</sup>			24,429	11.5	102,320
Manchester, N. H.	16,078 <sup>a</sup>				16,078	33.9	76,834

<sup>a</sup>Areas and population in all cases include only the corporate limits of the city, and not the county or suburban area.

<sup>a</sup>Pennsylvania Motor List Co. figures as of July 1, 1931.  
<sup>a</sup>The Reuben H. Donnelley Corporation figures as of July 1, 1931.

⊙—County figures for motor vehicles.  
 —Includes taxis and buses.  
 —Includes trucks.  
 —Includes trucks and buses.  
 —Includes trucks, taxis, and buses.  
 —Includes taxis.  
 —Includes buses.



# Motor Vehicles, 1931

Commerce, as of December 31, 1931)

City	Motor Cars	Motor Trucks	Taxis	Buses	Total M. V.	Area Sq. Mi.	Population
Memphis, Tenn.....	34,222	4,136	178*	.....	38,536	48.5	253,143
Miami, Fla.....	36,500	4,000	225	130	40,855	30.0	110,637
①Milwaukee, Wis.....	135,445	19,218	.....	163	154,826	42.0	578,249
②Minneapolis, Minn.....	140,295*	.....	433	.....	140,728	58.8	464,356
③Mobile, Ala.....	13,061	2,435	19	.....	15,515	19.8	70,602
④Nashville, Tenn.....	34,089	4,506	94	80	38,769	26.4	153,866
⑤New Bedford, Mass.....	15,809*	2,529*	.....	.....	18,338	19.3	112,597
New Britain, Conn.....	8,865	1,321	33	24	10,243	13.4	68,128
New Haven, Conn.....	22,890	5,366	198	265	28,719	17.9	162,655
New Orleans, La.....	61,522	12,819	.....	.....	74,341	200.0	473,000
New York, N. Y.....	636,869	120,032	35,230*	.....	792,131	299.0	6,930,446
Norfolk, Va.....	14,485	2,182	50	70	16,787	36.0	129,710
Oakland, Cal.....	92,325	5,130	203	181	97,839	60.2	284,063
⑥Oklahoma City, Okla.....	59,214*	5,354*	.....	.....	64,568	30.3	185,389
⑦Omaha, Neb.....	49,741	6,967	120	32	56,860	39.0	214,000
Pasadena, Cal.....	28,747*	.....	19	.....	28,766	18.1	76,047
Passaic, N. J.....	6,483	1,222	375*	.....	8,080	3.2	62,959
Pawtucket, R. I.....	10,000	300	.....	.....	10,300	8.9	77,149
Peoria, Ill.....	20,100	2,550	85	25	22,760	14.4	104,969
⑧Philadelphia, Pa.....	191,664*	37,707*	.....	.....	229,371	127.0	1,950,961
*Pittsburgh, Pa.....	59,971*	14,613*	.....	.....	74,584	49.1	669,817
Pontiac, Mich.....	15,483	1,397	53	7	16,940	19.8	60,000
Portland, Me.....	20,056*	.....	.....	.....	20,056	21.5	70,810
⑨Portland, Ore.....	89,188*	6,585*	.....	.....	95,773	66.6	301,815
Quincy, Mass.....	11,677*	1,107*	.....	.....	12,784	.....	71,983
Racine, Wis.....	17,689	2,881	52	11	20,633	8.2	67,542
*Reading, Pa.....	18,192*	3,200*	.....	.....	21,392	9.0	111,171
Roanoke, Va.....	10,135	1,146	43	90	11,414	10.8	71,000
⑩Rochester, N. Y.....	109,213*	.....	.....	.....	109,213	35.9	330,000
⑪Sacramento, Cal.....	45,517	3,022	55	6	48,600	14.0	93,750
⑫Saginaw, Mich.....	25,338	4,013	75	25	29,451	17.0	80,715
Salt Lake City, Utah.....	30,000	2,000	150	40	32,190	52.3	104,267
⑬San Antonio, Tex.....	63,364	12,685	.....	118	76,167	36.0	231,542
San Diego, Cal.....	74,486	2,985	125	85	77,681	94.8	147,995
San Francisco, Cal.....	145,753*	9,956*	.....	.....	155,709	42.1	634,394
Savannah, Ga.....	10,968	890	35	13	11,906	8.0	85,024
Seattle, Wash.....	92,000	10,000	258	114	102,372	104.0	365,583
Schenectady, N. Y.....	20,550	2,410	.....	.....	22,960	10.43	95,962
*Scranton, Pa.....	17,470*	3,716*	.....	.....	21,186	20.5	143,433
Shreveport, La.....	16,000	3,500	125	143	19,768	19.3	76,655
⑭Sioux City, Ia.....	24,975*	2,981*	.....	.....	27,956	45.0	79,183
⑮Somerville, Mass.....	11,426*	2,195*	.....	.....	13,621	.....	103,908
South Bend, Ind.....	26,934	3,955	86	.....	30,975	19.7	104,193
⑯Spokane, Wash.....	25,318	3,338	.....	.....	28,656	41.3	115,514
Springfield, Ill.....	17,350	2,703	44	22	20,119	9.6	71,864
⑰Springfield, Mass.....	28,996*	3,781*	.....	.....	32,777	33.1	149,900
Springfield, Ohio.....	14,842	1,551	20	8	16,421	12.0	68,840
Stamford, Conn.....	10,917	1,674	54	7	12,652	.....	46,346
St. Paul, Minn.....	60,000	12,000	170	90	72,260	55.0	271,606
⑱Syracuse, N. Y.....	62,316	9,033	.....	.....	71,349	25.3	209,326
Tacoma, Wash.....	26,000	3,700	29	53	29,782	51.2	106,817
⑲Tampa, Fla.....	25,000	4,000	50*	.....	29,050	26.0	101,161
⑳Terre Haute, Ind.....	20,000	4,500	.....	.....	24,500	10.0	74,214
Toledo, Ohio.....	80,000	7,000	400	200	87,600	38.0	325,000
Trenton, N. J.....	33,000*	.....	.....	.....	33,000	8.5	123,356
⑳Troy, N. Y.....	20,205	3,500	.....	.....	23,705	9.8	72,763
⑳Tulsa, Okla.....	425,152	53,741	.....	.....	478,893	23.0	141,258
⑳Utica, N. Y.....	28,365	4,560	215	78	33,218	21.0	105,000
Waterbury, Conn.....	12,378	2,410	65	17	14,870	29.0	99,902
Wichita, Kans.....	35,384	5,257	47	59	40,747	22.0	111,110
*Wilkes-Barre, Pa.....	12,584*	2,713*	.....	.....	15,297	7.3	86,626
Wilmington, Del.....	25,000	5,500	33	129	30,662	11.5	106,597
⑳Winston-Salem, N. C.....	13,535	2,350	.....	.....	15,885	.....	75,274
⑳Worcester, Mass.....	28,173*	3,715*	.....	.....	31,888	.....	195,311
Yonkers, N. Y.....	15,000	1,000	50	25	16,075	21.5	134,646
Youngstown, Ohio.....	34,000	4,300	35	150	38,485	34.5	170,004

# 5,035,000 Motor Vehicles on Farms

(Figures from U. S. Census of Agriculture, 1930)

States	Motor Vehicles	Passenger Cars	Motor Trucks	% Of All Trucks On Farms	Tractors	Tele-phones	Radios
Alabama.....	86,472	73,634	12,838	33.9	4,664	19,510	4,453
Arizona.....	12,978	9,916	3,062	28.6	2,558	2,672	2,352
Arkansas.....	76,935	65,935	11,000	27.6	5,684	25,046	6,001
California.....	177,813	136,842	40,971	19.1	44,437	48,171	.....
Colorado.....	69,176	52,258	16,918	59.3	13,334	23,877	19,188
Connecticut.....	19,498	13,154	6,344	12.6	2,667	11,366	10,200
Delaware.....	11,720	8,724	2,996	29.2	1,600	2,420	3,098
D. of Col.....	141	60	81	.....	17	69	35
Florida.....	38,590	26,387	12,203	21.2	5,618	3,525	3,644
Georgia.....	104,446	88,479	15,967	32.8	5,870	14,771	5,637
Idaho.....	40,247	33,966	6,281	45.9	4,691	15,733	11,023
Illinois.....	233,244	192,873	40,371	19.8	69,628	147,672	.....
Indiana.....	184,593	154,556	30,037	23.9	41,339	110,333	.....
Iowa.....	273,181	240,512	32,669	46.8	66,258	180,876	114,006
Kansas.....	204,666	171,018	33,648	45.6	66,275	120,890	64,572
Kentucky.....	93,972	86,784	7,188	21.5	7,322	61,631	16,992
Louisiana.....	52,363	43,082	9,281	20.0	5,016	6,106	.....
Maine.....	37,008	26,227	10,781	29.0	3,410	22,189	14,424
Maryland.....	49,256	37,972	11,284	29.0	7,208	11,935	.....
Massachusetts.....	27,210	17,638	9,572	9.7	3,921	16,581	.....
Michigan.....	187,690	150,922	36,768	20.9	34,579	73,757	.....
Minnesota.....	222,274	185,717	36,557	36.6	48,457	114,693	.....
Mississippi.....	102,066	85,563	16,503	50.5	5,542	15,858	3,859
Missouri.....	196,598	176,466	20,132	23.7	24,999	137,712	.....
Montana.....	52,781	38,166	14,615	58.2	19,031	9,697	16,109
Nebraska.....	167,189	141,144	26,045	61.6	40,729	93,888	65,273
Nevada.....	4,162	2,921	1,241	18.7	380	1,460	978
New Hampshire.....	15,618	11,079	4,539	32.4	1,096	9,313	7,344
New Jersey.....	37,124	22,371	14,753	11.0	8,088	10,373	.....
New Mexico.....	20,723	15,395	5,328	38.9	2,497	2,879	2,203
New York.....	200,890	141,916	58,974	17.2	40,369	78,185	.....
North Carolina.....	151,434	132,876	18,558	35.0	11,426	19,852	.....
North Dakota.....	95,788	78,798	16,990	65.4	37,605	31,878	30,692
Ohio.....	240,762	201,552	39,210	18.9	52,974	121,214	86,011
Oklahoma.....	151,378	127,448	23,930	39.6	25,962	53,149	.....
Oregon.....	57,181	47,440	9,741	44.5	9,838	26,557	.....
Pennsylvania.....	199,284	152,222	47,062	21.1	33,513	73,321	.....
Rhode Island.....	4,270	2,569	1,701	8.5	589	1,742	.....
South Carolina.....	68,720	61,754	6,966	27.2	3,462	6,357	.....
South Dakota.....	96,739	81,923	14,816	65.0	33,837	44,608	37,218
Tennessee.....	98,061	89,022	9,039	27.6	6,865	45,205	.....
Texas.....	352,756	300,176	52,580	28.7	37,348	97,346	.....
Utah.....	21,763	17,574	4,189	24.6	1,426	7,416	7,321
Vermont.....	23,655	18,620	5,035	58.8	2,426	15,093	10,689
Virginia.....	107,922	88,463	19,459	33.1	9,757	30,418	.....
Washington.....	74,831	55,995	18,836	30.2	8,388	31,764	.....
West Virginia.....	44,410	36,978	7,432	18.4	2,792	28,117	9,075
Wisconsin.....	228,550	176,764	51,786	49.7	50,173	107,486	72,826
Wyoming.....	16,932	12,824	4,108	46.6	4,110	4,483	4,967
Total.....	5,035,060	4,134,675	900,385	26.6	920,395	2,139,194	*

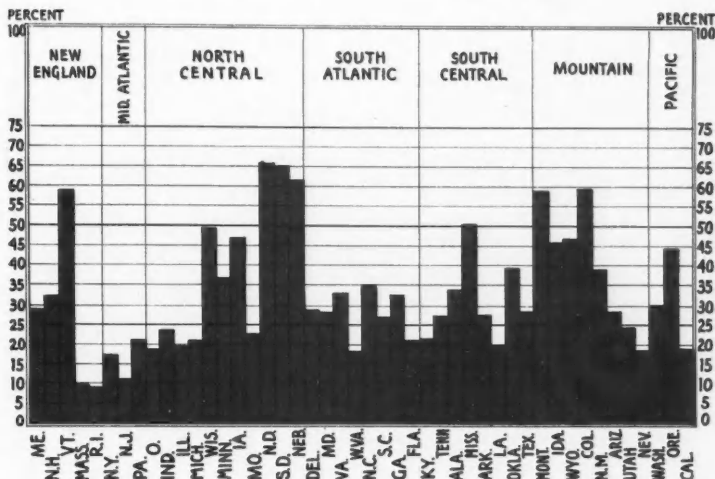
\*12,078,345 families, or 40% of 29,980,146 total city and farm families in the United States have radio sets. Radios on farms have been reported for only 27 states indicated above. Total farm radios in U. S. not yet available.



# Farmers Use 26% of All Trucks

## Chart Shows Farm Use of Trucks by States

(Figures from 1930 U. S. Census of Agriculture)



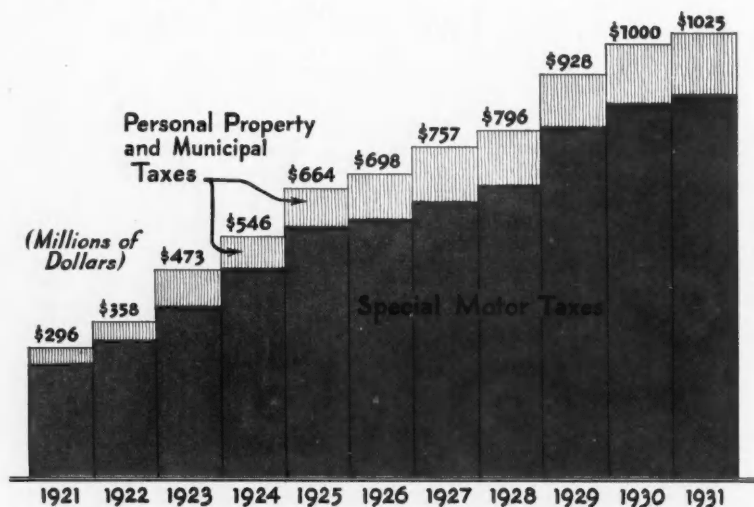
## Farm Road Net-Work Improving

### 42% of Farms Still Located on Unimproved Earth Roads

(Figures from Census of Agriculture)

Type of Road	NUMBER OF FARMS LOCATED ON ROADS			
	1925	Percent	1930	Percent
Concrete.....	156,434	2.4	202,581	3.2
Brick.....			13,180	.2
Asphalt.....			71,982	1.2
Macadam.....	316,527	5.0	306,368	4.9
Gravel.....	946,057	14.9	1,278,879	20.3
Sand-clay.....	1,998,704	31.4	156,789	2.5
Improved dirt.....			1,638,951	26.1
Unimproved dirt.....			2,279,976	36.2
All others.....	206,186	3.2	339,878	5.4
Total Farms.....	6,371,640	100%	6,288,584	100%

# \$1,025,735,000 Motor Taxes in 1931



## Motor Vehicle Taxes, 1919-1931

These are taxes on the motor vehicle owners. Income and property taxes on motor vehicle factories, garages, dealers, repair shops, terminals, truck, taxicab and bus operating companies are not included.

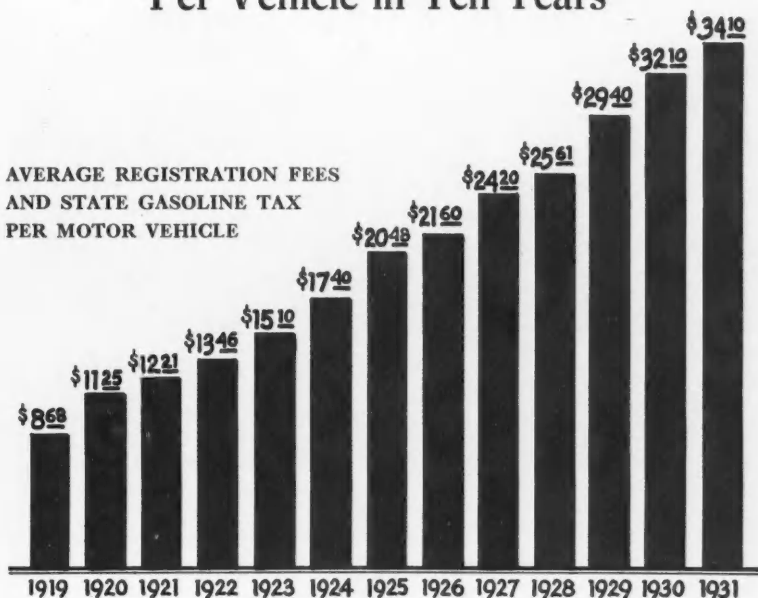
	Registration Fees	Gasoline Tax	War Excise Taxes†	Personal Property and Municipal Taxes‡	Total*
1919...	\$ 64,697,255	\$ 1,022,514	\$101,138,191	\$ 55,000,000	\$222,365,681
1920...	102,546,212	1,363,902	149,207,520	60,000,000	315,157,877
1921...	122,478,654	5,382,111	99,967,423	66,000,000	295,604,682
1922...	152,047,824	12,703,078	114,793,400	77,000,000	358,329,922
1923...	188,970,992	38,566,338	155,796,944	88,000,000	473,241,674
1924...	225,492,252	80,442,295	139,201,755	99,000,000	546,150,141
1925...	260,619,621	148,358,087	143,430,709	110,000,000	664,273,492
1926...	288,282,352	187,603,231	96,255,639	126,000,000	698,272,350
1927...	301,061,132	258,838,813	60,473,708	137,000,000	757,373,653
1928...	322,630,025	304,871,766	20,386,176	148,000,000	795,887,967
1929...	347,843,543	431,311,519	.....	149,000,000	928,155,062
1930...	355,704,860	494,683,410	.....	150,000,000	1,000,388,270
1931....	344,337,654	536,397,458	.....	145,000,000	1,025,735,112

\*Totals include Federal tax on vehicles for hire: 1919—\$507,721; 1920—\$2,040,243; 1921—\$1,776,494; 1922—\$1,785,620; 1923—\$1,907,400; 1924—\$2,013,839; 1925—\$1,865,075; 1926—\$131,128.

†Figures from Bureau of Internal Revenue; War tax removed May 29, 1928. ‡Estimated by N. A. C. C.

## Special Motor Taxes Increase 179% Per Vehicle in Ten Years

AVERAGE REGISTRATION FEES  
AND STATE GASOLINE TAX  
PER MOTOR VEHICLE



Average tax in 1931, including personal property and municipal taxes, was \$39.70. In the above chart only registration fees and state gasoline taxes have been used in computing the average tax per motor vehicle.

### Motor Vehicles Pay 10% of ALL Taxes

**\$1,025,735,112** *Motor Taxes*

**\$10,250,000,000**

*All Federal, State and Local Taxes*

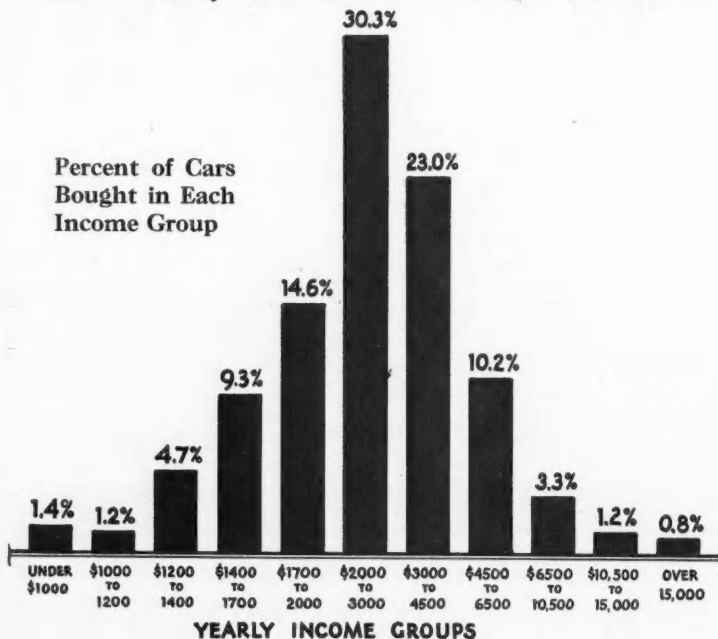
## 86% of Cars Sell For Less Than \$750 Wholesale

Wholesale Prices	Number	Per- cent
Over \$3,000	5,759	.28
\$2,001-3,000	12,714	.62
\$1,501-2,000	33,846	1.66
\$1,001-1,500	80,687	3.94
\$751-1,000	162,954	8.00
Under \$750	1,742,223	85.50

1931 Factory  
Sales, U. S. { 2,038,183 100%  
and Canada.. }

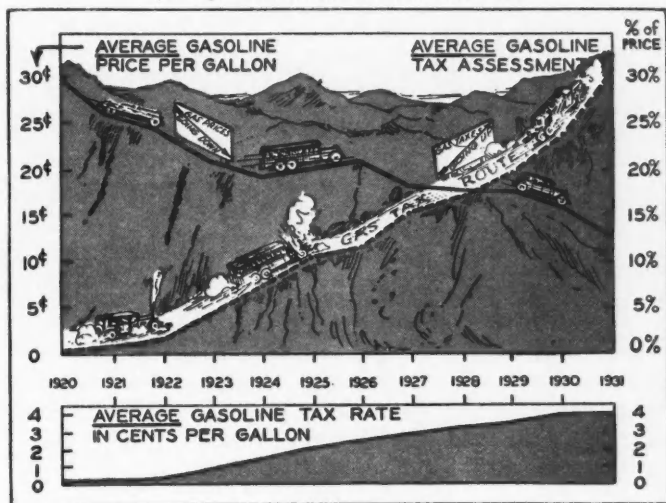


## 62% of All New Cars Are Bought by Persons with Yearly Income of Less Than \$3,000



# Taxes Average 30% of Gasoline Prices

(Chart from American Petroleum Institute)



## 5% Increase in Gasoline Consumption

(Figures from American Petroleum Institute)

	Gallons (000 omitted)			Gallons (000 omitted)	
	1930	1931		1930	1931
Alabama .....	172,537	162,672	Nebraska .....	228,898	228,200
Arizona .....	76,194	74,461	Nevada .....	19,502	23,544
Arkansas .....	138,632	127,074	New Hampshire...	64,743	68,305
California .....	1,335,556	1,401,544	New Jersey .....	644,658	711,128
Colorado .....	170,855	176,494	New Mexico .....	54,661	52,222
Connecticut .....	234,298	248,927	New York .....	1,511,997	1,625,571
Delaware .....	35,997	38,106	North Carolina...	263,475	255,691
District of Columbia	80,538	93,493	North Dakota .....	120,034	114,789
Florida .....	228,960	231,988	Ohio .....	975,582	984,809
Georgia .....	224,188	221,893	Oklahoma .....	323,112	300,357
Idaho .....	61,570	59,753	Oregon .....	170,701	174,550
Illinois .....	973,208	1,047,687	Pennsylvania .....	928,842	1,062,602
Indiana .....	456,101	481,471	Rhode Island .....	88,832	98,157
Iowa .....	393,115	412,424	South Carolina...	119,213	121,239
Kansas .....	386,755	485,483	South Dakota .....	140,580	134,514
Kentucky .....	168,278	176,203	Tennessee .....	215,244	214,369
Louisiana .....	184,781	187,955	Texas .....	806,505	826,107
Maine .....	109,001	116,199	Utah .....	60,547	61,175
Maryland .....	182,348	188,930	Vermont .....	46,998	49,151
Massachusetts .....	544,245	577,197	Virginia .....	228,453	244,151
Michigan .....	817,295	821,584	Washington .....	264,852	272,608
Minnesota .....	401,440	441,914	West Virginia .....	140,411	143,981
Mississippi .....	135,732	115,224	Wisconsin .....	437,878	455,649
Missouri .....	461,739	492,572	Wyoming .....	36,615	39,477
Montana .....	77,476	75,645			
			<b>Total .....</b>	<b>15,943,172</b>	<b>16,719,239</b>

# Gasoline Tax Receipts

## Exemption Refunds Have Been Excluded

(Figures from United States Bureau of Public Roads)

It is noteworthy that gas tax receipts show a steady increase year by year even though there is no increase in the tax rate. This is due to the gain in motor vehicles registered. Compare, for example, the yearly growth in gas tax receipts by states with a steady gas tax rate shown in the table on opposite page.

	1926	1927	1928	1929	1930	1931
Alabama.....	\$2,558,651	\$5,908,986	\$6,497,551	\$7,105,009	\$6,901,492	\$7,197,474
Arizona.....	978,264	1,388,830	2,018,202	2,559,831	2,670,019	3,204,288
Arkansas.....	3,585,304	4,338,737	5,382,782	6,681,029	6,427,273	6,448,049
California.....	16,502,123	22,467,083	29,566,769	34,192,087	34,870,126	39,863,637
Colorado.....	2,091,749	3,139,594	3,921,224	5,217,479	6,144,826	6,254,338
Connecticut.....	2,689,372	3,054,906	3,468,752	4,047,092	4,515,063	4,727,993
Delaware.....	390,414	662,159	800,349	935,947	1,013,357	1,072,061
Dist. of Col.....	1,015,193	1,148,794	1,263,148	1,428,181	1,599,689	1,726,296
Florida.....	11,431,486	10,980,596	11,235,225	12,203,056	13,655,175	14,986,170
Georgia.....	5,653,140	7,066,109	8,245,486	10,224,108	13,435,062	13,313,500
Idaho.....	1,122,217	1,571,749	1,883,865	1,945,980	2,730,862	2,598,366
Illinois.....		(1) 6,199,509	(1) 836,826	(1) 11,659,778	27,472,420	29,065,685
Indiana.....	8,971,741	10,133,568	11,177,549	15,610,251	17,158,834	18,064,553
Iowa.....	4,842,427	7,248,214	8,535,628	9,355,785	10,584,068	10,927,589
Kansas.....	4,303,388	4,594,650	5,394,841	8,171,205	9,120,491	8,070,885
Kentucky.....	4,935,078	5,913,396	6,741,781	7,742,564	8,414,733	8,810,130
Louisiana.....	2,708,567	3,034,056	3,380,931	6,978,651	7,546,448	9,397,783
Maine.....	1,823,346	2,288,933	3,192,384	3,708,682	4,382,728	4,382,728
Maryland.....	2,293,854	4,169,397	5,425,873	6,297,168	6,991,188	7,431,002
Massachusetts.....				(2) 9,758,816	10,562,947	15,306,376
Michigan.....	10,081,776	14,260,564	18,334,840	21,309,009	21,713,489	21,832,347
Minnesota.....	4,804,688	5,174,880	5,768,100	8,892,125	10,359,111	11,070,159
Mississippi.....	4,088,200	4,890,686	5,564,711	7,045,120	6,917,575	5,882,264
Missouri.....	5,661,145	6,330,983	6,948,229	7,680,672	8,639,161	9,206,564
Montana.....	870,712	1,436,398	1,683,404	2,802,017	2,941,879	3,018,154
Nebraska.....	3,039,927	3,664,919	3,941,164	7,799,479	9,060,422	9,096,248
Nevada.....	405,818	471,624	531,186	652,301	675,012	777,918
New Hampshire.....	768,582	1,268,907	1,884,175	2,267,052	2,499,478	2,657,143
New Jersey.....		(3) 4,082,860	8,446,930	9,961,276	11,380,231	17,124,632
New Mexico.....	762,851	1,415,690	1,836,900	2,273,966	2,761,887	2,664,704
New York.....				(4) 19,065,174	28,476,290	30,544,061
North Carolina.....	7,786,473	8,796,682	9,787,011	12,006,384	12,533,454	14,024,303
North Dakota.....	988,493	1,275,565	1,478,107	1,799,226	1,971,986	2,030,238
Ohio.....	13,257,266	19,910,481	24,885,699	34,082,188	37,081,451	39,328,053
Oklahoma.....	6,212,409	7,197,956	8,147,901	10,841,609	12,092,420	11,665,432
Oregon.....	3,333,829	3,643,191	4,008,259	4,542,602	6,198,777	6,186,918
Pennsylvania.....	11,781,782	17,286,333	21,998,064	35,747,314	33,623,510	32,452,677
Rhode Island.....	511,896	915,959	1,182,328	1,542,759	1,735,747	1,892,635
South Carolina.....	4,496,968	5,080,385	5,518,240	6,866,608	7,145,711	7,245,989
South Dakota.....	1,924,758	2,393,592	3,158,873	3,545,765	3,503,882	3,394,675
Tennessee.....	3,852,524	4,476,180	5,134,600	9,290,853	10,719,195	11,461,023
Texas.....	5,226,886	15,650,841	17,945,037	22,317,494	29,527,098	30,514,558
Utah.....	1,258,009	1,461,261	1,664,247	1,979,226	2,105,529	2,309,227
Vermont.....	553,093	905,244	1,118,882	1,703,091	1,879,921	1,966,544
Virginia.....	5,855,670	7,139,707	8,616,239	9,894,941	10,775,058	11,445,215
Washington.....	3,482,093	3,821,438	4,206,515	5,943,039	7,253,249	11,032,462
West Virginia.....	2,922,675	3,794,068	4,301,883	4,866,192	5,367,078	5,387,217
Wisconsin.....	5,209,805	6,027,114	6,856,759	7,485,039	8,314,841	15,780,181
Wyoming.....	568,589	756,049	954,317	1,296,299	1,447,005	1,587,014
Total.....	\$187,603,231	\$258,838,813	\$304,871,766	\$431,311,519	\$494,683,410	\$536,397,458

(1) Illinois gas tax effective Aug. 1, 1927 to Feb. 25, 1928 when it was declared unconstitutional; present gas tax law went into effect August 1, 1929.

(2) Massachusetts gas tax effective Jan. 1, 1929. (3) New Jersey tax effective July 1, 1927. (4) New York gasoline tax went into effect May 1, 1929.



# Gasoline Tax Rates by States

(Figures are Cents Per Gallon)

	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931
Alabama.....					2	2	2	2	4	4	4	4	5
Arizona.....				1	3	3	3	3	4	4	4	4	5
Arkansas.....			1	1	3	4	4	4	5	5	5	5	6
California.....					2	2	2	2	3	3	3	4	4
Colorado.....	1	1	1	1	2	2	2	2	3	3	4	4	4
Connecticut.....			1	1	1	1	2	2	2	2	2	2	2
Delaware.....					1	2	2	2	3	3	3	3	3
Florida.....			1	1	3	3	4	4	5	5	6	6	7
Georgia.....			1	1	3	3	3½	3½	4	4	6	6	6
Idaho.....					2	2	3	3	4	4	4	5	5
Illinois.....									2	2	3	3	3
Indiana.....					2	2	3	3	3	3	4	4	4
Iowa.....					2	2	2	2	3	3	3	3	3
Kansas.....					2	2	2	2	2	2	3	3	3
Kentucky.....		1	1	1	1	3	3	5	5	5	5	5	5
Louisiana.....				1	1	2	2	2	2	2	4	5	4
Maine.....					1	1	2	2	4	4	4	4	4
Maryland.....				1	1	2	2	2	4	4	2	2	3
Massachusetts.....											2	2	3
Michigan.....							2	2	3	3	3	3	3
Minnesota.....							2	2	2	2	3	3	3
Mississippi.....				1	1	3	3	4	4	5	5	5½	5½
Missouri.....					2	2	2	2	2	2	2	2	2
Montana.....			1	1	2	2	2	2	2	2	2	2	2
Nebraska.....							2	2	2	2	4	4	4
Nevada.....					2	2	4	4	4	4	4	4	4
New Hampshire.....					1	2	2	2	3	4	4	4	4
New Jersey.....									2	2	2	3	3
New Mexico.....			1	1	1	1	3	3	5	5	5	5	5
New York.....											2	2	2-3½
North Carolina.....			1	1	3	3	4	4	4	4	5	5	6
North Dakota.....	1	1	1	1	1	1	1	2	2	2	3	3	3
Ohio.....					1	2½	2	2	3	3	4	4	4
Oklahoma.....					1	2½	3	3	3	3	4	4	4
Oregon.....	1	1	2	2	3	3½	3	3	3	3	3	4	4
Pennsylvania.....			1	1	2	2	2	2	3	3	4	3	3
Rhode Island.....							1	1	2	2	2	2	2
South Carolina.....				2	3	2	3	3	3	4	4	6	6
South Dakota.....					2	2	2	3	4	4	5	4	4
Tennessee.....					2	2	3	3	3	3	5	5	7
Texas.....					1	1	1	1	3	2	4	4	4
Utah.....					2½	2½	3½	3½	3½	3½	3½	3½	4
Vermont.....					1	1	2	2	2	3	3	4	4
Virginia.....					3	3	3	4	4½	5	5	5	5
Washington.....			1	1	1	2	2	2	2	2	3	3	3
West Virginia.....					2	2	3½	3½	4	4	4	4	4
Wisconsin.....							2	2	2	2	2	2	2
Wyoming.....					1	1	2½	2½	3	3	4	4	4
District of Col.....						2	2	2	2	2	2	2	2

13 cents tax effective March 1, 1932.

NOTE—The above table is corrected as of April 1st, 1932.

# \$536,397,000 Gas Taxes, 1931,

State	Gross Tax Assessed Prior to Deduction of Refund	Exemption Refund (Deducted From Gross Tax)	Net Tax Earning on Motor Vehicle Fuel 1/	Other Receipts, Under Tax Law (Licenses, Etc.)	Grand Total Earning (Tax and Other Receipts)
Alabama.....	\$7,197,474		\$7,197,474		\$7,197,474
Arizona.....	3,595,902	\$391,614	3,204,288	\$32	3,204,320
Arkansas.....	6,956,952	508,903	6,448,049		6,448,049
California.....	44,588,156	4,724,519	39,863,637		39,863,637
Colorado.....	7,069,749	805,411	6,254,338		6,254,338
Connecticut.....	4,732,734	4,741	4,727,993	48,759	4,776,752
Delaware.....	1,141,921	69,860	1,072,061		1,072,061
Florida.....	14,986,170		14,986,170	32,050	15,018,220
Georgia.....	13,313,500		13,313,500		13,313,500
Idaho.....	2,953,992	355,626	2,598,366	11,061	2,609,427
Illinois.....	30,495,596	1,429,911	29,065,685		29,065,685
Indiana.....	19,258,819	1,224,266	18,034,553	8,972	18,043,525
Iowa.....	12,378,724	1,451,135	10,927,589		10,927,589
Kansas.....	11,383,674	3,312,789	8,070,885		8,070,885
Kentucky.....	8,810,130		8,810,130	2,864	8,812,994
Louisiana.....	9,398,107	324	9,397,783		9,397,783
Maine.....	4,609,316	226,588	4,382,728	56,647	4,439,375
Maryland.....	7,796,063	365,061	7,431,002		7,431,002
Massachusetts.....	15,573,815	267,439	15,306,376		15,306,376
Michigan.....	23,908,116	2,075,769	21,832,347	40,293	21,872,640
Minnesota.....	12,542,814	1,472,655	11,070,159		11,070,159
Mississippi.....	5,882,264		5,882,264	127,172	6,009,436
Missouri.....	9,475,871	269,307	9,206,564		9,206,564
Montana.....	3,801,888	783,734	3,018,154		3,018,154
Nebraska.....	9,176,004	79,756	9,096,248		9,096,248
Nevada.....	905,533	127,615	777,918		777,918
New Hampshire.....	2,720,395	63,252	2,657,143		2,657,143
New Jersey.....	17,141,415	16,783	17,124,632	48,215	17,172,847
New Mexico.....	2,664,704		2,664,704		2,685,577
New York.....	31,422,861	878,800	30,544,061	45,095	30,589,156
North Carolina.....	14,371,270	346,967	14,024,303		14,024,303
North Dakota.....	3,149,024	1,118,786	2,030,238	2,217	2,032,455
Ohio.....	41,272,028	1,943,975	39,328,053		39,328,053
Oklahoma.....	11,674,218	8,786	11,665,432		11,665,432
Oregon.....	6,935,821	748,903	6,186,918		6,186,918
Pennsylvania.....	32,929,982	477,305	32,452,677	\$735,913	33,188,590
Rhode Island.....	1,963,128	70,493	1,892,635	3,640	1,896,275
South Carolina.....	7,274,440	28,451	7,245,989		7,245,989
South Dakota.....	5,157,175	1,762,500	3,394,675		3,394,675
Tennessee.....	11,461,023		11,461,023		11,461,023
Texas.....	33,462,890	2,948,332	30,514,558		30,514,558
Utah.....	2,311,734	2,507	2,309,227	451	2,309,678
Vermont.....	1,966,544		1,966,544		1,966,544
Virginia.....	12,210,867	765,652	11,445,215		11,445,215
Washington.....	12,313,127	1,280,665	11,032,462		11,032,462
West Virginia.....	5,665,218	278,001	5,387,217	8,005	5,395,222
Wisconsin.....	16,471,048	690,867	15,780,181		15,780,181
Wyoming.....	1,587,014		1,587,014		1,587,014
Dist. of Col.....	1,740,022	13,726	1,726,296		1,726,296
<b>Total.....</b>			<b>536,397,458</b>	<b>1,192,259</b>	<b>537,589,717</b>

1—Net gasoline tax earned after deduction of refunds allowed by law. 2—Many states pay collection cost from other state funds, and such are noted. Administration cost here includes balances allocated to reserve funds for administrative purposes, and amounts are noted. 3—Since this table covers the calendar year earnings, but not the actual collections during the year, these columns are not comparable with similar columns in tables F-1 and F-4 which cover different periods fixed by state and local agencies; also certain funds are allocated to bond payments shown in next column. 4—Payments are for state highway bonds, except as noted. 5—Includes payments on county bonds, \$3,395,828. 6—For expenses of motor vehicle department. 7—Includes \$61,857 for next 6 months' expenses, in reserve. 8—For expenses of transportation license tax division. 9—Expenses of \$30,000 paid from motor vehicle fees. 10—Includes \$249,355 as payments on county road bonds. 11—Includes \$11,690 gasoline tax reserve fund, assigned to administration. 12—Payments on county road bonds. 13—Consists of \$200,000 to permanent fund for state buildings of higher learning, \$1,917,773 for county schools, and \$822,747 to state general revenue fund. 14—To an equalization fund for public schools. 15—Includes \$17,007 to reserve for refunds. 16—To state treasury note redemption fund. 17—To an aviation fund, being amount of aviation gas tax. 18—Consists of \$939,778 for state board of education, and \$939,778 for boards of commissioners of ports of New Orleans and Lake Charles Harbor. 19—To conservation department for oyster propagation. 20—Consists of \$38,108 from tax on gas used in aeronautics assigned to state aeronautic fund, and \$2,185 collected from licenses to state general fund. 21—Includes \$5,861 to state accounting department for aud-

# and Disposition of Gas Taxes

DISPOSITION OF GRAND TOTAL EARNING ACCORDING TO LAW						
Collection and Administration Cost	Construction and Maintenance on Rural Roads	State and County Road Bond Payment	On City Streets	Other Than Highway Purposes	State	
2/	3/	4/				
\$16,644	\$2,204,117	\$3,248,655	\$1,728,058		Alabama	
	2,227,256	977,064			Arizona	
20,000	200,000	787,846	\$5,282,399	\$107,804	Arkansas	\$850,000
124,632	26,467,700	13,233,850			California	\$37,455
67,379	4,330,871	1,670,479		185,609	Colorado	
	4,776,752				Connecticut	
	533,881		\$538,180		Delaware	
132,050	5,781,048	423,555	\$5,781,047		Florida	\$3,000,520
4,200	8,872,867	2,218,217			Georgia	\$2,218,216
130,355	2,325,833		\$242,594		Idaho	\$10,645
106,834	19,305,901	9,652,950			Illinois	
66,942	13,482,437	3,370,609	1,123,537		Indiana	
62,956	6,372,372	4,492,261			Iowa	
	6,270,885	1,800,000			Kansas	
30,987	8,782,007				Kentucky	
62,000	4,791,951		2,664,276		Louisiana	\$1,879,556
32,772	2,203,302	2,203,301			Maine	
20,549	5,868,362			1,467,091	Maryland	\$175,000
	12,535,626	902,267		1,868,483	Massachusetts	
54,639	14,707,047	4,070,661	3,000,000		Michigan	\$40,293
	7,380,106	3,690,053			Minnesota	
111,281	2,901,625	2,871,310			Mississippi	\$225,220
49,189	9,157,375				Missouri	
27,147	2,970,346		20,661		Montana	
11,250	6,813,749	2,271,249			Nebraska	
	777,918				Nevada	
	1,992,857		664,286		New Hampshire	
18,600	11,636,747		427,500	5,000,000	New Jersey	\$290,000
160,110	1,686,034		928,933		New Mexico	\$10,500
50,000	22,904,367	6,107,831			New York	\$1,526,958
9,370	4,379,478	2,639,474	\$16,400,509		North Carolina	\$2595,472
133,237	1,332,351	666,175			North Dakota	\$692
107,956	22,061,305	9,805,024		7,353,768	Ohio	
71,552	7,249,008	2,416,302			Oklahoma	\$1,928,570
18,300	6,168,618				Oregon	
1765,125	23,423,209	5,563,743	3,436,513		Pennsylvania	
	1,422,206		474,069		Rhode Island	
	4,796,512	1,207,665	\$1,241,812		South Carolina	
148,602	3,346,073				South Dakota	
57,305	4,209,658	2,994,786	\$14,199,274		Tennessee	
	22,885,918				Texas	\$67,628,640
4,214	2,305,464				Utah	\$125,000
	1,562,638		278,906		Vermont	
	8,011,651	3,433,564			Virginia	
	8,587,166	2,445,296			Washington	
14,777	2,054,573		3,325,872		West Virginia	
20,469	8,830,643	4,514,643	\$1,797,646	617,300	Wyamin	
5,894	1,129,841	395,279	56,000		Wyoming	
				1,726,296	Dist. of Col.	
2,117,317	354,017,281	100,073,959	\$42,488,535	19,449,888	19,442,737	Total

iting. <sup>22</sup>—For sea-wall protecting road. Derived from extra gas taxes in Harrison County (2 cents) and Hancock County (3 cents) shown in other receipts, \$127,172; and the remainder from state highway system share of gas tax receipts. <sup>23</sup>—For inland waterways under Department of Commerce and Navigation. <sup>24</sup>—Includes balances in suspense fund and operating fund of \$28,318. <sup>25</sup>—Loans to motor vehicle department and public auditing department. <sup>26</sup>—To New York City general fund. <sup>27</sup>—Includes \$1,381,146 payments on county road bonds. <sup>28</sup>—For state highway patrol and administration expenses of state revenue department. <sup>29</sup>—Includes \$8,237 to reserve for refunds. <sup>30</sup>—Dealers' license fees credited to state general fund. <sup>31</sup>—Consists of \$1,000,000 special emergency relief for destitute, and remainder for distribution of field and garden seed. <sup>32</sup>—Payments reported from motor vehicle fees, instead of assigning a pro rata share to gasoline taxes. <sup>33</sup>—Includes expenses of department of revenues prorated to gasoline taxes. <sup>34</sup>—Consists of delinquent collections of previous years, penalties and fines. <sup>35</sup>—Paid from motor vehicle fees, \$15,737. <sup>36</sup>—Includes all payments on state highway bonds, as pro rata share not reported in disposition of motor vehicle receipts. <sup>37</sup>—Includes \$31,602 to reserve for refunds. <sup>38</sup>—All state highway bonds retired on January 15, 1931, by funds previously accumulated. <sup>39</sup>—Includes county road bond payments \$2,089,184. <sup>40</sup>—For free school fund. <sup>41</sup>—Paid from motor vehicle department appropriation, estimated \$2,000. <sup>42</sup>—Transfer to motor vehicle department. <sup>43</sup>—Paid from motor vehicle fund, \$10,000. <sup>44</sup>—Payments on county road bonds. <sup>45</sup>—Includes payments on county road bonds, \$27,451,735, on state highway bonds, \$14,794,206 and in note fund, \$242,594.

# Motor Vehicle Registration Receipts

(Figures from United States Bureau of Public Roads)

	1927	1928	1929	1930	1931
Alabama.....	\$3,127,000	\$3,474,065	\$3,736,380	\$3,799,761	\$3,379,392
Arizona.....	454,429	565,806	748,565	734,626	767,508
Arkansas.....	3,662,272	3,786,004	4,212,161	4,283,959	3,495,545
California.....	8,795,343	9,232,301	10,489,061	9,858,810	9,763,274
Colorado.....	1,600,222	1,790,183	1,835,386	1,901,230	1,910,741
Connecticut.....	6,805,664	7,373,589	7,992,755	8,290,404	8,259,542
Delaware.....	846,289	928,916	1,023,440	1,110,047	1,043,173
District of Columbia.....	531,044	473,981	665,914	636,001	623,460
Florida.....	5,692,128	4,935,995	4,959,129	4,813,495	4,851,968
Georgia.....	3,712,978	4,041,767	4,568,209	4,482,257	4,256,553
Idaho.....	1,502,185	1,626,949	1,787,467	1,998,290	1,909,363
Illinois.....	14,839,593	15,521,530	17,087,209	18,444,247	18,426,497
Indiana.....	5,430,806	5,751,781	6,253,424	6,346,879	6,332,101
Iowa.....	10,371,699	10,692,767	11,919,350	12,693,621	12,539,613
Kansas.....	6,518,622	5,394,448	5,697,306	6,084,348	6,069,910
Kentucky.....	4,365,062	4,725,258	5,381,302	5,547,069	4,842,108
Louisiana.....	4,199,347	4,383,634	4,523,634	4,609,042	4,549,244
Maine.....	2,558,046	2,763,596	3,030,128	3,166,642	3,184,091
Maryland.....	2,987,912	3,034,621	3,295,314	3,437,796	3,497,807
Massachusetts.....	13,136,442	13,919,618	7,117,725	7,120,583	7,000,306
Michigan.....	17,984,210	20,056,848	23,212,316	22,482,412	21,821,290
Minnesota.....	10,233,644	10,101,785	10,846,826	11,062,150	10,784,845
Mississippi.....	2,556,627	2,814,150	2,963,381	3,046,393	2,421,287
Missouri.....	8,253,009	8,765,609	9,690,727	10,150,000	10,140,429
Montana.....	1,136,103	1,298,828	1,549,487	1,583,276	1,499,492
Nebraska.....	3,740,553	3,950,788	4,289,969	3,804,950	3,742,401
Nevada.....	229,839	249,111	298,881	373,966	388,327
New Hampshire.....	1,915,291	2,070,957	2,248,213	2,290,435	2,257,459
New Jersey.....	12,963,541	13,569,029	14,803,016	15,382,456	15,891,204
New Mexico.....	528,193	627,751	756,763	1,279,623	1,248,097
New York.....	31,757,889	34,306,706	38,293,313	40,857,715	41,877,611
North Carolina.....	13,246,853	6,088,140	7,045,116	6,835,743	6,164,549
North Dakota.....	1,595,442	1,775,145	1,989,475	1,958,662	1,799,120
Ohio.....	10,745,471	11,840,258	12,860,453	13,287,352	12,818,705
Oklahoma.....	5,753,912	6,258,610	6,964,360	6,536,361	5,857,107
Oregon.....	6,527,341	6,969,221	7,644,226	7,917,930	6,940,504
Pennsylvania.....	26,017,495	27,113,777	29,264,695	33,112,371	31,607,172
Rhode Island.....	2,093,309	2,273,819	2,403,809	2,280,849	2,272,879
South Carolina.....	2,187,290	2,440,539	2,674,379	2,878,352	2,790,008
South Dakota.....	2,491,981	2,901,905	3,150,657	2,959,913	2,808,172
Tennessee.....	3,765,775	4,066,478	4,288,420	4,767,239	4,580,685
Texas.....	15,626,531	17,701,251	20,418,696	13,961,362	13,994,647
Utah.....	672,403	731,340	838,300	855,584	828,303
Vermont.....	1,878,950	2,090,960	2,339,782	2,392,152	2,355,913
Virginia.....	5,235,953	5,572,046	6,145,296	6,493,989	6,159,257
Washington.....	6,482,354	7,028,291	7,547,382	7,616,676	7,623,570
West Virginia.....	4,004,391	4,142,595	4,565,836	4,702,812	4,519,763
Wisconsin.....	9,772,887	10,774,707	11,780,703	13,083,521	11,724,995
Wyoming.....	525,807	572,570	647,200	691,509	727,667
<b>Total.....</b>	<b>\$301,061,132</b>	<b>\$322,630,025</b>	<b>\$347,843,543</b>	<b>\$355,704,860</b>	<b>\$344,337,654</b>

—Change of fiscal year; last half only included.

—Change of fiscal year, 18 months included.



# \$344,337,654 in State Motor License Fees; and Their Use, 1931

(Figures from United States Bureau of Public Roads)

## DISPOSITION OF GROSS RECEIPTS

	Total Gross Receipts	Truck Receipts	Collection and Ad- minist <sup>1</sup> n <sup>2</sup>	State Highways	Local Roads	State and County Road Bonds <sup>3</sup>	For Other Purposes
Alabama.....	\$3,379,392		\$138,793	\$1,185,848	\$604,674	\$1,450,077	
Arizona.....	267,508	\$248,211	190,092	577,416			
Arkansas.....	3,495,545					\$3,495,545	
California.....	9,763,274	2,347,038	1,345,908	3,334,032	3,334,031		\$1,749,303
Colorado.....	1,910,741	405,925	163,315	873,713	873,713		
Connecticut.....	8,259,542	1,447,667	719,000	7,540,542			
Delaware.....	1,043,173	246,479		504,993		\$538,180	
Florida.....	4,851,968	1,190,167	292,439	4,128,094	216,074		\$215,361
Georgia.....	4,256,553	804,680	211,282	4,045,271			
Idaho.....	1,909,363	398,383	57,281	179,652	1,672,430		
Illinois.....	18,426,497	4,478,859		10,531,277		7,895,220	
Indiana.....	6,332,101	1,454,789	357,172	5,974,929			
Iowa.....	12,539,613	1,844,220	373,768	11,789,170			\$376,675
Kansas.....	6,059,910		390,900	3,869,010	1,800,000		
Kentucky.....	4,842,108	1,248,638	469,786	3,756,746	615,576		
Louisiana.....	4,549,244	1,062,032	50,000	4,159,744		339,500	
Maine.....	3,184,091	634,031	337,255	1,362,040		1,333,523	\$151,273
Maryland.....	3,497,807	359,295	349,781	2,518,421			\$629,605
Massachusetts.....	7,000,306	1,248,242	1,580,903	4,737,296		682,107	
Michigan.....	21,821,290	4,425,752	1,064,847	13,041,324	6,000,000	1,082,060	\$633,059
Minnesota.....	10,784,845	2,002,192	400,000	4,785,823		\$5,536,652	\$62,370
Mississippi.....	2,421,287		164,322	153,099	2,103,866		
Missouri.....	10,140,423		537,132	5,331,647		4,281,650	
Montana.....	1,499,492	286,710	32,144		1,467,348		
Nebraska.....	3,742,401	548,850	114,794	1,088,282	2,539,325		
Nevada.....	388,327	94,360	43,089	180,750		164,488	
N. Hampshire.....	2,257,459		201,113	2,056,346			
New Jersey.....	15,891,204	4,090,389	1,125,694	7,229,510	7,310,000		\$226,000
New Mexico.....	1,248,097	305,086	98,917	689,508	459,672		
New York.....	41,877,611	10,297,611	\$937,211	30,777,359	6,099,597		\$4,063,444
North Carolina.....	6,164,549		135,000	2,552,000		\$3,426,749	\$50,800
North Dakota.....	1,799,120	412,633	73,015	1,019,203	706,902		
Ohio.....	12,818,705	5,019,026	496,510	6,040,981	6,281,214		
Oklahoma.....	5,857,107		242,466	2,249,545	3,365,096		
Oregon.....	6,940,504	940,644	467,478	1,492,236	1,618,257	3,362,533	
Pennsylvania.....	31,607,172	7,324,786	3,297,276	23,262,534		3,436,513	\$1,610,849
Rhode Island.....	2,272,879	471,442	266,364	1,932,924	73,591		
South Carolina.....	2,790,008	484,980	65,231	2,555,093			\$169,684
South Dakota.....	2,808,172	433,410	80,240	1,371,696	1,356,236		
Tennessee.....	4,580,685		86,321	2,132,670	2,132,670		\$229,024
Texas.....	13,994,647	3,885,757	671,855	4,451,194	8,871,598		
Utah.....	828,303		67,697			737,500	\$23,106
Vermont.....	2,355,913	403,283		2,355,913			
Virginia.....	6,169,257	925,322	241,409	5,730,617			\$187,231
Washington.....	7,623,570	1,537,256	584,290	1,183,355	4,420,434		\$435,491
West Virginia.....	4,519,763	951,311	236,908	882,855		3,400,000	
Wisconsin.....	11,724,995	2,800,036	800,046	3,557,461	6,121,321	1,246,167	
Wyoming.....	727,667			561,667		166,000	
D. of Columbia.....	623,460	25,926	139,560				\$483,900
<b>Total.....</b>	<b>\$344,337,654</b>		<b>\$19,688,604</b>	<b>\$200,733,786</b>	<b>\$70,043,625</b>	<b>\$42,574,464</b>	<b>\$11,297,175</b>

<sup>1</sup>—States for which no figures are shown make state appropriations for administration. <sup>2</sup>—Payments on state bonds except as noted. <sup>3</sup>—Includes payments of \$2,239,615 on county road bond. <sup>4</sup>—Includes \$46,310 reserve for refunds; remainder for state highway patrol. <sup>5</sup>—Includes payments of \$349,355, on county road bonds. <sup>6</sup>—For county school fund. <sup>7</sup>—For county general funds. <sup>8</sup>—New Law April 1931 created a state highway fund from which appropriations are made. The disposition shown is on old basis from actual expenditures and is set up to compare with previous year. <sup>9</sup>—State highway patrol. <sup>10</sup>—For Baltimore streets. <sup>11</sup>—Includes \$5,154,152 payments on county road bonds. <sup>12</sup>—For state general fund. <sup>13</sup>—Includes \$201,000 for free bridge commission and \$25,000 for traffic commission. <sup>14</sup>—Excludes \$1,827,515 appropriation from state general fund. <sup>15</sup>—For New York City general fund. <sup>16</sup>—Includes \$971,749 payments on county road bonds. <sup>17</sup>—State highway patrol \$1,070,019, and payment of gasoline tax collection cost \$540,830. <sup>18</sup>—Includes \$38,054 reserve fund; remainder for state highway patrol. <sup>19</sup>—Refund reserve. <sup>20</sup>—For signals and streets as appropriated by Congress. <sup>21</sup>—Total for 37 states and District of Columbia segregating registration fees for passenger cars and buses \$194,863,906, trucks \$67,085,238.

# Automotive Freight on Railroads, 1931

3,106,645 Carloads—\$396,738,000 Revenues

## AUTOMOTIVE PROPORTION OF ALL RAILROAD CARLOADS

	All Traffic, Carloads (I. C. C. Statistics)	Of which Auto Mfg. and Use and Highway Building Produces: (See table following)	
		Carloads	Per Cent
Products of Manufactures and Miscellaneous.....	7,816,414	2,254,845	*28.8%
Products of Forests and Mines.....	11,181,786	851,800	†7.6%
All other Carload Traffic.....	5,633,771		
<b>Total carload traffic originated</b>	<b>24,631,961</b>	<b>3,106,645</b>	<b>12.6%</b>

\*In 1929—23%; 1930—24%. †In 1929—4.5%; 1930—5.8%.

## AUTOMOTIVE FREIGHT 3,106,645 CARLOADS

	Automotive Freight Carloads*		Automotive Freight Carloads*
Motor vehicles, parts, tires.....	410,845	Crude rubber.....	11,800
Gasoline.....	1,330,000	Asphalt for roads.....	48,000
Iron and steel.....	96,000	Brick, vitrified.....	50,000
Coal.....	60,000	Cement for roads, bridges.....	236,000
Crude petroleum.....	55,000	Gravel, sand, stone for roads.....	655,000
Lubricating oil.....	53,000	Miscellaneous, such as non-ferrous metals, paints, upholstery materials	40,000
Lumber.....	22,000		
Road and fuel oil.....	39,000		

**Total Automotive Freight Carloads..... 3,106,645**

\*Partly estimated by National Automobile Chamber of Commerce.

## SHIPMENTS OF ASSEMBLED PASSENGER CARS AND MOTOR TRUCKS

From Factories and Assembling Plants in United States, including Exports

Year	Railroad Freight Carloads	Machines Delivered Overland	Machines Shipped by Boat	Year	Railroad Freight Carloads	Machines Delivered Overland	Machines Shipped by Boat
1931.....	233,858	1,050,545	85,609	1928.....	733,982	1,222,992	179,173
1930.....	423,486	1,412,450	99,414	1927.....	639,630	738,839	124,369
1929.....	733,631	1,958,738	199,576	1926.....	750,265	1,066,819	110,770

## AUTOMOBILE FREIGHT ON STEAMSHIPS

The major tonnage of important steamship lines consists of automobiles and parts en route to foreign countries.

Shipments on coastwise and Great Lakes steamers number 85,609 vehicles.

## Rail Carloads of Automobiles, Trucks, Parts and Tires, 1931

(From Railroad Commodity Reports)

EASTERN LINES	Carloads Originated	Carloads received from Connections	Total Carloads Carried	Revenue
N. Y. C. Lines (B. & A. R. R.—C. C. C. & St. L. Lines—M. C. R. R.—N. Y. C. R. R.—P. & L. E. R. R.).....	111,324	46,962	158,286	\$11,529,216
G. T. W. R. R.....	56,000	7,149	63,149	2,797,181
P. M. R. R.....	30,446	4,361	34,807	1,985,083
D. T. & I. R. R.....	25,820	3,374	29,194	1,235,979
Penn. R. R.....	22,546	24,027	46,573	3,657,465
Erie R. R.....	18,690	26,073	44,763	2,805,923
Chicago & Erie R. R.....	278	4,256	4,534	155,485
B. & O. R. R.....	13,449	21,078	34,527	2,454,248
Wabash Ry.....	7,658	23,430	31,088	2,124,048
Ann Arbor R. R.....	91	2,568	2,659	147,009
Reading Co.....	4,458	20,064	24,522	742,465
C. R. R. of N. J.....	192	8,758	8,950	178,043
A. C. & Y. Ry.....	4,493	300	4,793	226,843
N. & W. Ry.....	3,459	4,812	8,271	784,789
N. Y. C. & St. L.....	2,503	10,468	12,971	731,731

(Continued on following page)

# **EASTERN LINES (Continued)**

	Carloads Originated	Carloads received from Connections	Total Carloads Carried	Revenue
B. & M. R. R.	2,451	15,099	17,550	838,275
D. & T. S. L. R. R.	2,430	8,164	10,594	181,499
D. L. & W. R. R.	2,072	18,098	20,170	1,238,181
C. & O. Ry.	1,194	7,727	8,921	575,011
C. & E. I. Ry.	868	3,432	4,300	221,167
L. V. R. R.	728	21,135	21,863	1,429,362
C. I. & L. R. R.	645	2,339	2,984	135,595
W. & L. E. Ry.	559	7,375	7,934	226,534
N. Y. N. H. & H. R. R.	463	14,501	14,964	1,383,605
Western Maryland Ry.	327	2,514	2,841	117,362
B. R. & P. Ry.	309	9,643	9,952	101,319
D. & H. R. R.	298	9,612	9,910	237,548
Miscellaneous	672	49,809	50,481	1,720,941

## **Total Eastern Lines**

314,277 362,946 677,223 \$36,975,875

# **SOUTHERN LINES**

Southern Ry.	9,239	9,321	18,560	\$1,262,354
C. N. O. & T. P. Ry.	2,172	6,153	8,325	821,651
M. & O. R. R.	344	979	1,323	127,132
A. G. S. R. R.	174	875	1,049	58,655
N. O. & N. E. R. R.	123	813	936	48,099
G. S. & F. Ry.	23	2,780	2,803	183,401
Ill. Cent. R. R.	3,613	16,408	20,021	1,767,888
Y. & M. V. R. R.	361	1,908	2,269	195,309
C. of Ga. Ry.	109	1,684	1,793	14,862
L. & N. R. R.	3,217	5,201	8,418	855,599
S. A. L. Ry.	861	4,177	5,038	417,384
A. C. L. R. R.	709	4,445	5,154	447,969
Norfolk Southern R. R.	180	1,038	1,218	92,894
G. M. & N. R. R.	4	1,132	1,136	93,360
N. O. G. N. R. R.	102	540	642	30,993
N. C. & St. L. Ry.	62	1,826	1,888	136,292
Clinchfield R. R.	.....	3,422	3,422	183,822
Miscellaneous	252	4,282	4,534	231,970

## **Total Southern Lines**

21,545 66,984 88,529 \$6,970,124

# **WESTERN LINES**

Mo. Pac. R. R.	13,312	8,663	21,975	\$2,151,300
St. Louis, Brownsville & M. Ry.	74	319	393	51,083
Int. Gt. Northern Ry.	234	2,279	2,513	241,484
N. O. T. & M. Ry.	72	431	503	4,045
T. & P. Ry.	475	6,216	6,691	520,959
C. M. St. P. & P. R. R.	13,832	8,856	22,688	2,247,263
C. & N. W. Ry.	13,563	10,769	24,332	1,522,402
So. Pac. Co. (Pac. Lines)	11,081	11,628	22,709	3,771,206
T. & N. O. R. R.	358	6,457	6,815	806,667
C. B. & Q. R. R.	2,875	6,353	9,228	1,206,905
Col. Southern Ry.	390	541	931	58,877
A. T. & S. Fe Ry.	2,491	9,861	12,352	3,257,974
G. C. & S. Fe Ry.	80	1,074	1,154	98,804
P. & S. F. Ry.	8	5,518	5,526	117,970
St. L., S. F. & Texas Ry.	2,484	2,603	5,087	653,475
St. L., S. F. & Texas Ry.	46	898	944	38,538
C. R. I. & P. Ry.	2,386	9,207	11,593	1,609,851
C. R. I. & G. Ry.	14	3,687	3,701	91,280
Union Pacific R. R.	919	14,117	15,036	2,970,940
L. A. & S. L. R. R.	1,254	2,744	3,998	750,745
O. S. L. R. R.	35	6,088	6,123	510,819
O. W. R. R. & Nav. Co.	76	1,781	1,857	214,003
St. J. & G. I. Ry.	.....	3,078	3,078	50,853
M. K. T. R. R.	1,904	2,884	4,788	643,907
M. K. T. R. R. of Texas	111	3,600	3,711	214,991
St. L. S. W. Ry.	1,900	2,974	4,874	799,398
St. L. S. W. Ry. of Texas	11	3,862	3,873	215,221
Gt. Northern Ry.	702	4,601	5,303	1,248,719
Kansas City Sou. Ry.	626	3,603	4,229	318,764
N. P. Ry.	531	4,196	4,727	1,141,311
M. St. P. & S. S. M.	369	2,390	2,759	276,908
D. R. G. W. R. R.	325	4,489	4,814	620,257
Western Pacific R. R.	312	3,008	3,320	635,773
Louisiana & Arkansas Ry.	249	1,481	1,730	197,988
Alton R. R.	231	1,073	1,304	86,031
C. G. W. R. R.	169	3,860	4,029	303,207
M. & St. L. R. R.	135	2,123	2,258	130,498
S. P. & S. Ry.	42	1,784	1,826	165,015
Green Bay & Western R. R.	.....	1,733	1,733	80,051
Miscellaneous	143	10,123	10,266	422,349

## **Total Western Lines**

73,819 180,952 254,771 \$30,357,701

# **Total U. S. Autos, Trucks and Parts including Tires**

410,845 ..... \$76,672,315

# 1931 Livestock Haulage by Truck Increases 34% Over 1930

(Figures from National Live Stock Marketing Association)

	Market Receipts 1930	Market Receipts 1931	% Increase or Decrease		Market Receipts 1930	Market Receipts 1931	% Increase or Decrease
<b>Buffalo</b>				<b>Kansas City</b>			
Rail....	1,428,121	1,294,616	- 9.3	Rail....	4,942,586	4,262,427	-13.7
Truck...	164,615	160,819	- 2.3	Truck...	1,254,407	1,275,842	+ 1.7
	<u>1,592,736</u>	<u>1,455,435</u>	- 8.6		<u>6,196,993</u>	<u>5,538,269</u>	-10.6
<b>Chicago</b>				<b>National Stock Yards (East St. Louis)</b>			
Rail....	10,256,013	10,274,016	+ 0.1	Rail....	3,791,904	3,004,470	-20.7
Truck...	763,704	1,105,084	+44.7	Truck...	1,442,251	1,797,524	+24.6
	<u>11,020,717</u>	<u>11,379,100</u>	+ 3.2		<u>5,234,155</u>	<u>4,801,994</u>	- 8.2
<b>Cincinnati</b>				<b>†Omaha</b>			
Rail....	477,677	455,621	- 4.6	Rail....	5,975,961	5,555,993	- 7.0
Truck...	692,069	857,962	+20.4	Truck...	2,415,565	3,184,003	+31.4
	<u>1,169,736</u>	<u>1,313,583</u>	+12.3		<u>8,391,526</u>	<u>8,739,996</u>	+ 4.1
<b>Cleveland</b>				<b>St. Joseph</b>			
Rail....	853,745	690,954	-19.0	Rail....	2,180,423	1,768,380	-18.8
Truck...	362,179	419,057	+15.7	Truck...	1,459,988	1,633,905	+11.9
	<u>1,215,924</u>	<u>1,110,011</u>	- 8.7		<u>3,640,411</u>	<u>*3,403,285</u>	- 6.5
<b>Detroit</b>				<b>Sioux City</b>			
Rail....	532,378	394,589	-25.8	Rail....	2,082,710	1,828,128	-12.2
Truck...	613,673	674,870	+ 9.9	Truck...	2,278,758	2,947,595	+29.3
	<u>1,146,051</u>	<u>1,069,459</u>	- 6.6		<u>4,361,468</u>	<u>4,775,723</u>	+ 9.5
<b>Evansville</b>				<b>Pittsburgh</b>			
Rail....	36,350	25,737	-30.0	Rail....	929,573	719,419	-22.6
Truck...	296,465	275,925	- 6.9	Truck...	84,200	137,241	+62.9
	<u>332,815</u>	<u>301,662</u>	- 9.3		<u>1,013,773</u>	<u>856,660</u>	-15.5
<b>Fort Worth</b>				<b>St. Paul</b>			
Rail....	1,332,465	1,772,805	+33.0	Rail....	4,141,474	4,112,447	- 0.7
Truck...	347,904	457,822	+31.5	Truck...	1,310,253	2,243,439	+71.2
	<u>1,680,369</u>	<u>2,230,627</u>	+32.7		<u>5,451,727</u>	<u>*6,355,886</u>	+16.5
<b>Indianapolis</b>				<b>TOTAL</b>			
Rail....	605,598	315,641	-47.8	Rail....	39,567,968	36,475,243	- 7.8
Truck...	1,714,600	1,905,617	+11.1	Truck...	14,016,204	18,826,517	+33.6
	<u>2,320,198</u>	<u>2,221,258</u>	- 4.2		<u>53,584,172</u>	<u>55,301,760</u>	+ 3.2

†Figures from Bureau of Publicity, Omaha Chamber of Commerce.

\*Figures from U. S. Department of Agriculture.





## Trucks Hauled 21,162,000 Head of Livestock in 1931

(Figures from Corn Belt Farm Dailies)

17 Leading Markets	1930	1931
Total head of livestock hauled.....	16,947,803	21,162,430
Increase over preceding year.....	17%	25%
Number of truck loads.....	1,600,000	1,750,000
Truck mileage traveled.....	100,000,000	100,000,000
Length of haul.....	1—300 miles	1—300 miles
Average haul.....	60 miles	65 miles
Number of pounds.....	5,000,000,000	6,000,000,000
Total value.....	\$470,000,000	\$450,000,000
Percent of total livestock receipts by truck.....		33%

Years	Cattle	Calves	Hogs	Sheep	Total
1920.....	407,114		2,110,172	248,226	2,765,512
1925.....	627,377	567,573	3,469,395	714,523	5,378,868
1926.....	830,478	877,812	4,256,648	925,518	6,890,456
1927.....	946,689	740,038	5,546,448	1,159,926	8,393,101
1928.....	1,338,802	824,712	8,592,411	1,437,133	12,193,058
1929.....	1,568,740	1,092,786	10,011,565	1,837,433	14,510,524
1930.....	2,054,664	1,369,592	11,045,914	2,447,633	16,947,803
1931.....	2,677,811	1,286,779	13,442,893	3,430,947	21,162,430

## Trucks Deliver 20% of Fruits and Vegetables in New York City, 1930

(From United States Department of Agriculture)

### CARLOT EQUIVALENTS

	Rail	Truck	Total	Truck % Total
New York.....	175,387*	44,728	220,115	20.3%
Denver.....	6,623	2,691	9,314	28.9%
Salt Lake City.....	2,013	2,431	4,444	54.7%

\*Includes receipts by boat.

## Trucks Unload 64% of Farm Produce in Los Angeles, 1931

(From United States Department of Agriculture)

	NUMBER CARLOTS			PER CENT		
	1929	1930	1931	1929	1930	1931
*Boat.....	2,999	3,225	4,102	5.2	5.3	6.6
*Express.....	877	705	558	1.5	1.2	.9
Rail.....	19,163	19,407	17,584	33.4	32.1	28.2
*Truck.....	34,294	37,085	40,012	59.9	61.4	64.3
<b>Total.....</b>	<b>57,333</b>	<b>60,422</b>	<b>62,256</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\*Carlot equivalents.

## Leading Truck Fleets in the United States

	Trucks		Trucks
American Tel. & Tel. Company	15,500	Standard Oil Company (Ohio)...	996
Standard Oil Company (N. J.)...	12,000	Consol. Gas Co. of N. Y. ....	981
Borden Company.....	10,000	Sheffield Farms.....	900
Railway Express Agency.....	9,247	Calif. Dept. of Public Works...	860
Standard Oil Company (Ind.)...	7,465	United States Trucking Corp...	819
National Dairy Products Co....	6,000	American Stores Company.....	682
Mid-West Utilities Company....	3,881	Sun Oil Company.....	551
Continental Baking Company....	3,500	Southern Calif. Edison Co. Ltd..	537
Standard Brands, Incorporated...	3,275	Shell East. Pet. Prod., Inc. (N.Y.)	513
Standard Oil Company (Calif.)...	2,677	United Parcel Service.....	510
N. Y. City Dept. Sanitation....	2,587	Pacific Gas and Electric Company	479
Gulf Refining Company.....	2,262	N. Y. State Highway Division...	473
Ward Baking Company.....	2,240	Humble Oil & Refining Company	440
Commonwealth & Southern Corp.	2,103	Consolidated Laundries Corp....	430
Standard Oil Company of N. Y....	2,098	R. H. Macy & Co.....	415
Armour and Company.....	1,973	Minnesota Highway Dept.....	404
National Biscuit Company.....	1,882	Philadelphia Electric Company..	397
General Baking Company.....	1,856	Pie Bakeries, Inc.....	365
Shell Petroleum Corporation (Mo.)	1,542	Postal Telegraph-Cable Co.....	347
American Ice Company.....	1,487	Reid Ice Cream Corp.....	241
Shell Oil Company (California)...	1,478	Motor Haulage Co.....	236
The Texas Corporation.....	1,446	Indian Refining Company.....	200
Penna. Dept. of Highways.....	1,328	N.Y. & Queens El. Light & P. Co.	185
The Atlantic Refining Company...	1,177	Beech-Nut Packing Company...	177
Union Oil Company of California.	1,167	Hoffman Beverage Co.....	165
Department of Highways, Tenn...	1,037	New York Edison Company.....	127
Sinclair Refining Company.....	1,020	Shell Oil Company of Canada...	117
Western Dairy Products, Inc....	1,015		

## Motor Vehicles Owned by U. S. Government, Jan. 1, 1932

Department	Passenger Cars	Buses	Trucks	Department	Passenger Cars	Buses	Trucks
Agriculture.....	900	4	3,700	Post Office (2)....	...	...	8,450
Commerce.....	214*	1	529	Prohibition.....	1,188	...	63
Interior.....	1,417	...	1,431	State.....	3	...	2
I. C. C.....	...	...	2	Treasury.....	22	...	49
Justice.....	1,162*	1	220	Veterans.....	287*	40	440
Labor.....	365	1	33	War.....	...	...	6,128
Marine Corps....	95	...	600				
Navy.....	222	8	1,436	Total (1).....	5,875	55	23,083

\*Includes ambulances. (1)—Other vehicles owned are—Tractors: Commerce, 15; Justice, 92; Veterans, 71. Trailers: Commerce, 13; Justice, 2; War, 574. Motorcycles: Justice, 2; Navy, 14. Bicycles: War, 846. (2)—In addition to vehicles owned Post Office Department utilizes 69,130 vehicles through contract, rural carriers, star routes and similar services.

## Rail Use of Motor Transport Increases

(Figures from Railway Age)

	1926	1927	1928	1929	1930	1931
Number of Railways Operating Buses.	25	52	64	78	81	80
Number of Buses Operated.....	450	800	1,047	2,389	4,000	5,000
Number of Railways Operating Trucks	20	30	45	55	60	85
Number of Trucks Operated*.....	1,600	3,300	4,900	5,900	7,000	10,000

\*Exclusive of vehicles operated by Railway Express Agency which is not controlled by railroads.

# Trailer Registrations by States, 1925-1931

(Figures from U. S. Bureau of Public Roads)

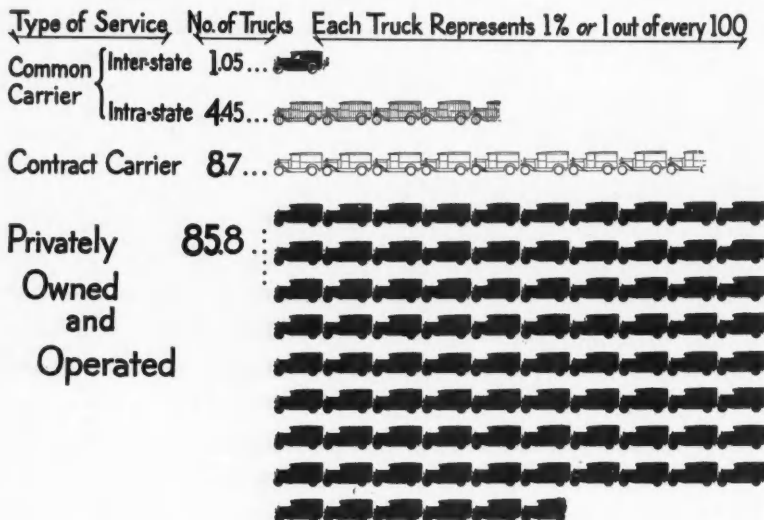
STATES	1925	1926	1927	1928	1929	1930	1931
Alabama.....	480	983	1,472	1,952	3,024	3,550	3,279
Arizona.....				809	1,249	1,346	1,623
Arkansas.....	918	1,584	1,977	2,054	2,808	2,805	3,745
California.....	27,542	30,818 <sup>1</sup>	34,126	37,073	42,899	48,532	55,024
Colorado.....	82	86 <sup>2</sup>	88	85	159	188	258
Connecticut.....	332	326	150	224	324	480	926
Delaware.....	166	199	243	301	389	412	517
Florida.....	1,062	1,000 <sup>4</sup>	1,000 <sup>4</sup>	1,000 <sup>4</sup>	900	5,000	6,751
Georgia.....				816 <sup>4</sup>	2,597	2,704	3,317
Idaho.....	168	180	186	264	485	450	7,558
Illinois.....	3,777	3,258	3,489	3,742	5,068	7,341	9,283
Indiana.....	5,068	5,697	6,599	7,884	10,407	13,646	19,169
Iowa.....	125	153	170	230	528	1,542	3,207
Kansas.....		1,221		359	360	1,083	1,778
Kentucky.....				?	?	?	?
Louisiana.....			3,500	4,000	8,000	5,443	5,670
Maine.....	790	871	1,012	1,068	1,652	2,207	3,053
Maryland.....	586	634	616	683	876	1,008	1,128
Massachusetts.....	702	464	443	547	556	701	650
Michigan.....	10,592	13,628	17,853	23,198	31,577	44,441	61,932
Minnesota.....	1,912	2,666	3,286	3,894	4,783	9,541	18,291
Mississippi.....		757	2,317	2,919	4,321	3,890	2,560
Missouri.....	1,087	1,489	1,739	2,004	2,686	3,742	5,469
Montana.....						56	59
Nebraska.....	807		1,828	2,975	6,515	10,320	15,737
Nevada.....	20	60	104	178	273	330	411
New Hampshire.....	497	535	565	545	635	935	1,137
New Jersey.....	1,389	1,602	1,827	1,996	2,424	2,639	2,916
New Mexico.....	88	143	193	340	509	850	778
New York.....	5,051	6,175	6,936	7,148	8,232	10,205	12,596
North Carolina.....	500	500	1,618	1,944	3,584	5,845	8,118
North Dakota.....							
Ohio.....	9,000	9,150 <sup>3</sup>	12,134	14,606	15,000	24,356	32,717
Oklahoma.....							
Oregon.....		812		1,238	1,308	1,893	2,168
Pennsylvania.....	2,821	3,313	3,780	4,285	5,067	5,684	6,307
Rhode Island.....	59	45	57	61	87	90	64
South Carolina.....	824	1,006	1,387	1,637	2,048	2,976	2,100
South Dakota.....						?	4,994
Tennessee.....		?	?	?	?	?	2,696
Texas.....	4,600	6,920	9,826	11,955	16,260	29,853	33,861
Utah.....	200	430				?	767
Vermont.....		133		218	280	315	457
Virginia.....	440	437	466	646	966	1,318	1,582
Washington.....	1,595	1,826	2,072	2,279	2,986	3,147	3,000
West Virginia.....	345	329	392	600	725	928	1,270
Wisconsin.....	?			412	497	715	1,007
Wyoming.....							
Dist. of Col.....							
<b>Totals.....</b>	<b>83,625</b>	<b>99,430</b>	<b>123,451</b>	<b>148,169</b>	<b>193,044</b>	<b>262,507</b>	<b>349,930</b>

<sup>1</sup>—Some states include trailers with motor trucks, as noted: other states do not register same. <sup>2</sup>—Excludes 2,232 tax exempt trailers of which 1,490 are owned by Public Service Corporations. <sup>3</sup>—Includes road tractors. <sup>4</sup>—Estimated and excluded from motor trucks as reported. <sup>5</sup>—Reported with tractors, but here separated as per semi-annual report. <sup>6</sup>—Not registered. <sup>7</sup>—Classified with trucks. <sup>8</sup>—Estimated as trailers and motorcycles reported together.

## Interstate Common Carrier Trucks 1% of Total

(Figures from Survey of 11 Western States by U. S. Bureau of Public Roads)

If all the trucks in use were parked in one place and classified according to type of service, each group of 100 trucks would be proportioned as shown in the diagram.

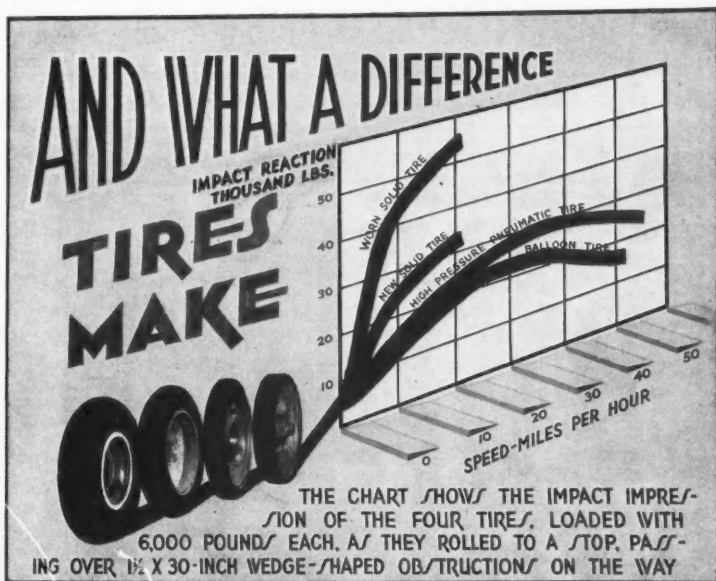


## Trucks Pay Taxes Proportionate to Road Wear

A survey has been made in Pennsylvania by the U. S. Bureau of Public Roads for the purpose of ascertaining whether trucks are paying enough taxes, especially trucks of various capacities, to cover highway expenditures due to truck operation. It indicates that trucks are paying sufficient taxes as a group and that the taxes on the various capacities are roughly in proportion to road wear. Taxes on light trucks are somewhat excessive while taxes on heavy vehicles are slightly low.

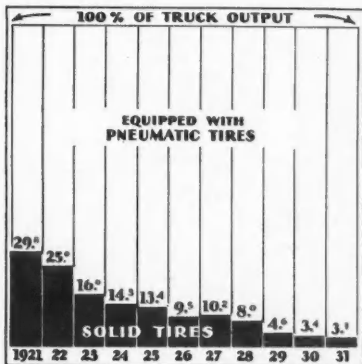
Class of Vehicle	License Fee*	Gas Tax (3 cts. gal.)	Present Payment	Required Payment
Passenger car .....	\$10.50	\$14.00	\$24.50	\$26.00
1/2-ton truck .....	16.50	20.00	36.50	26.00
3/4-ton truck .....	26.00	21.50	47.50	26.00
1-ton truck .....	35.00	25.00	60.00	46.00
1 1/2-ton truck .....	45.00	43.00	88.00	58.00
2-ton truck .....	63.00	50.00	113.00	100.00
3-ton truck .....	90.00	60.00	150.00	159.00
4-ton truck .....	110.00	75.00	185.00	212.00
5-ton truck .....	155.00	100.00	255.00	276.00

\*For pneumatic tired vehicles.



(Chart from U. S. Bureau of Public Roads)

## Solid Tire Use Rapidly Decreasing



Use of solid and cushion tire equipment on new motor trucks showed a continued decrease in 1931.

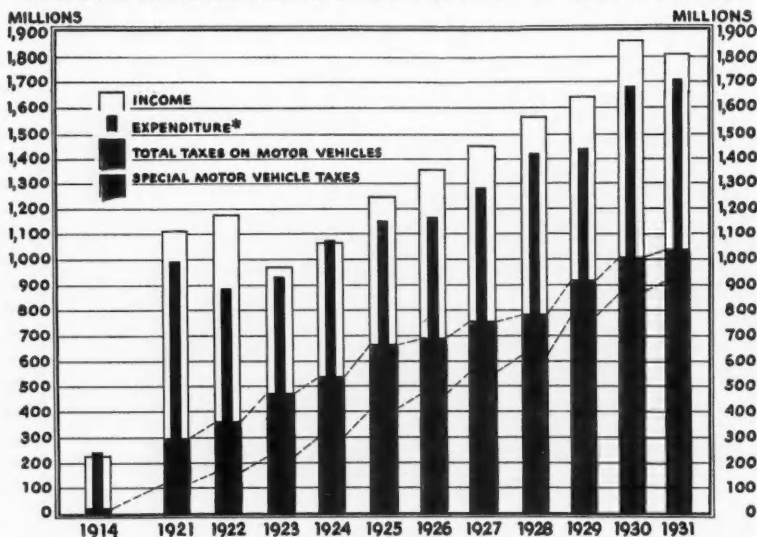
Estimates indicate that only 3.1 per cent of the 1931 truck production had solid or cushion tire equipment whereas in 1921 the percentage of commercial vehicles so equipped amounted to 29.8 per cent.

Solid tire use is now confined almost exclusively to a limited field of specialized hauling including road construction, excavating and the transportation of structural steel and other extremely heavy loads, mostly intra-city hauling.

### SOLID AND CUSHION TIRE SHIPMENTS

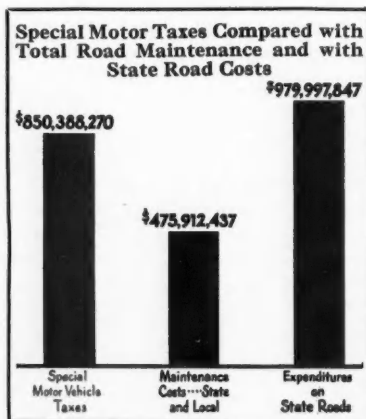
Year	Total Solid and Cushion Tire Shipments	Original Equipment 25%	Replacement 75%
1921.....	684,140	171,036	513,104
1922.....	965,060	241,260	723,700
1923.....	981,499	245,374	736,125
1924.....	898,072	224,520	673,552
1925.....	1,067,193	266,800	800,393
1926.....	733,316	183,330	549,986
1927.....	744,000	186,000	558,000
1928.....	683,470	170,870	512,600
1929.....	570,372	142,592	427,780
1930.....	313,420	78,352	235,068
1931.....	209,440	52,360	157,080

## Three-Fifths of Road Income From Motor Taxes



\*The continued excess of income over expenditures as represented in the height of the respective bars in the diagram, is explained by the fact that receipts from bond issues have been included in the income account, but payments on principal of bonds have not been included in expenditures. However, interest payments have been included in expenditures.

## Commercial Vehicles Pay \$293,305,000 Taxes, 1931



Motor truck license fees...	\$ 77,000,000*
Motor truck gas taxes.....	144,530,000†
Common carrier bus license and gas taxes.....	31,775,000‡
<b>Total Special Taxes.....</b>	<b>\$253,305,000</b>

Estimated personal property taxes, municipal levies, etc.....	40,000,000§
<b>TOTAL.....</b>	<b>\$293,305,000</b>

\*Based on payment of \$67,085,238 in license fees in 37 states and District of Columbia.

†Based on estimated annual consumption of 1200 gallons, at average tax of 3.48 cents a gallon.

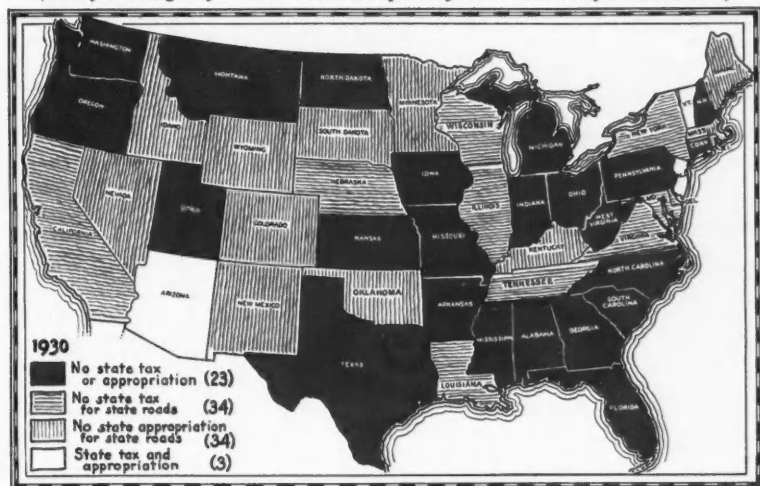
‡From National Association of Motor Bus Operators.

§Estimated by National Automobile Chamber of Commerce.

## 34 States Levied No General Property Taxes for State Highways in 1930

23 States Made No Special Appropriations or General Levies on Property  
for State Highways

(Data from Highway Income Tables Compiled by U. S. Bureau of Public Roads)



## Holland Tunnel Traffic Increases 6 Percent in 1931

(Figures from Port Authority of New York)

Year	Passenger Cars	Motor Trucks	Buses	Trailers	Motorcycles	Misc. Special	Total
1927*	813,891	159,201	7,009	.....	2,106	193	982,400
1928	6,836,822	1,617,082	233,278	8,476	21,102	27,914	8,744,674
1929	8,609,106	1,935,519	356,934	21,619	21,409	33,323	10,977,910
1930	9,586,729	1,956,166	462,440	24,716	20,454	16,272	12,066,777
1931	10,256,756	1,981,880	465,016	31,459	20,675	117	12,755,903
Total	36,103,304	7,649,848	1,524,677	86,270	85,746	77,819	45,527,664

### Tunnel Tolls Yield

\$25,068,226 Revenue

1927*	\$518,223.10
1928	4,842,201.32
1929	6,120,904.61
1930	6,643,864.95
1931	6,943,032.25
Total	\$25,068,226.23

### Tunnel Income

\$6,943,032 in 1931

Passenger Cars	\$5,127,175.90
Motor Trucks	1,285,805.20
Buses	462,273.60
Trailers	42,138.30
Motorcycles	5,165.95
Misc. Special	20,473.30
Total	\$6,943,032.25

\*Tunnel opened November 13, 1927.

# Rural Road Progress

(Figures from United States Bureau of Public Roads)

RURAL ROAD MILEAGE				RURAL ROAD FINANCE			
Year	Total	Surfaced	High Type Surface <sup>1</sup>	Income <sup>2</sup>	Expenditure <sup>3</sup>	State Road Bonds Outstanding <sup>4</sup>	Federal Aid Paid to States <sup>5</sup>
1904...	2,151,379	153,530	144	\$79,623,616	\$79,595,418	\$4,525,000	.....
1909...	2,199,645	190,476	725	.....	.....	20,007,500	.....
1914...	2,445,761	257,291	14,442	240,263,784	249,055,067	93,264,000	.....
1921...	2,941,294	387,760	35,874	1,109,895,916	994,103,567	272,205,400	\$55,974,306
1922...	2,960,000	410,000	.....	1,170,000,000	898,352,307	411,702,900	88,205,933
1923...	2,995,727	439,341	54,217	976,426,191	938,305,299	472,868,600	69,677,242
1924...	3,004,411	471,668	63,797	1,074,172,717	1,075,593,689	549,685,050	79,217,398
1925...	3,006,083	521,260	76,342	1,245,271,344	1,144,415,513	700,576,150	95,749,998
1926...	3,000,190	550,064	82,987	1,348,693,973	1,163,747,971	765,678,250	87,754,535
1927...	3,013,584	588,721	91,935	1,452,579,433	1,283,110,631	857,315,250	81,371,013
1928...	3,016,281	626,137	102,559	1,566,946,170	1,423,870,278	892,510,450	80,802,233
1929...	3,024,233	662,435	112,454	1,646,030,433	1,444,668,985	1,008,856,150	80,830,336
1930...	3,009,066	693,559	125,708	1,860,741,853	1,680,493,095	1,151,571,820	75,880,863
1931...	3,009,066	730,000	*145,000	1,800,000,000	1,700,000,000	.....	133,340,910

<sup>1</sup>—Includes bituminous macadam by penetration, and higher types. <sup>2</sup>—After year 1914 excludes transferred funds between state and local authorities thus omitting duplications. <sup>3</sup>—After year 1914 excludes disbursements other than on roads, such as transferred funds between state and local authorities, and payments of principal for bond retirement. <sup>4</sup>—All highway bonds issued by both state and local authorities and outstanding at the end of 1914 were \$344,763,082; 1921, \$1,222,312,300; 1926, \$2,152,016,633. <sup>5</sup>—Fiscal years ending June 30. Accumulated total paid to states prior to June 30, 1931 was \$952,792,934. <sup>6</sup>—Estimated by N. A. C. C.

## 78% of State Highway Bonds Based on Special Motor Taxes in Past Ten Years

In 1930 State Road Bonds Were Based 94.2% on Motor Taxes, 3.6% on Tolls from Bridges and Tunnels, and 2.2% on General Property Taxes

(Figures from U. S. Bureau of Public Roads)

Calendar Year	Amount Issued <sup>1</sup>	SOURCES OF REPAYMENT		REVENUE	
		Toll Bridges and Tunnels <sup>2</sup>	Motor Taxes (Vehicle and Gas)	General Property Taxes <sup>3</sup>	General
1921.....	\$109,419,600	\$ 5,000,000	\$ 54,741,600	\$ 49,678,000	
1922.....	92,435,000	5,000,000	61,150,000	26,285,000	
1923.....	100,527,000	2,000,000	77,917,000	20,610,000	
1924.....	87,936,000	11,000,000	62,494,000	14,442,000	
1925.....	148,988,000	11,000,000	127,775,000	10,213,000	
1926.....	79,194,000	3,000,000	59,394,000	16,800,000	
1927.....	109,925,000	3,000,000	96,050,000	10,875,000	
1928.....	89,975,000	8,000,000	70,725,000	11,250,000	
1929.....	135,162,000	12,500,000	105,606,000	17,056,000	
1930.....	135,166,000	4,850,000	127,400,000	2,916,000	
Percent 1930.....	100%	3.6%	94.2%	2.2%	
Total 10 years.....	\$1,088,727,600	\$65,350,000	\$843,252,600	\$180,125,000	
Percent.....	100%	6%	77.5%	16.5%	

Source of information: Bond tables submitted by states to Bureau of Public Roads. Column (1) adjusted to calendar year basis; other columns derived from state bond laws.

<sup>1</sup>—Irregularity of amount of State highway bonds issued is due to biennial session of legislatures authorizing bonds on odd years.

<sup>2</sup>—Bridge and tunnel bonds are generally paid by tolls of motorists.

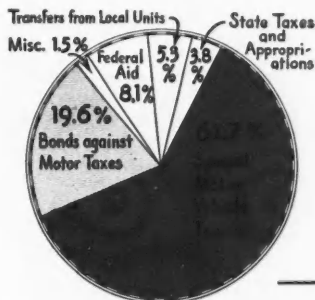
<sup>3</sup>—Combines property taxes and other State Treasury revenues.



# Special Motor Taxes Pay 77% of Current State Highway Income

(Figures from U. S. Bureau of Public Roads)

	Amount 1930	Percent of Current Income	Percent of Total Funds
State tax and appropriation from state treasury . .	\$43,317,991	4.7	3.8
Special motor taxes:			
Motor-vehicle fees . . . . .	\$289,801,438		
Gas tax . . . . .	\$411,109,446	76.7	61.7
Miscellaneous income . . . . .	17,083,821	1.9	1.5
Federal aid . . . . .	92,462,836	10.1	8.1
Transfers from local units . . . . .	60,609,297	6.6	5.3
Total current income . . . . .	\$914,385,129	100.0	....
Bonds . . . . .	222,288,308*	....	19.6*
Total funds available for expenditure . .	\$1,136,673,437	....	100.0

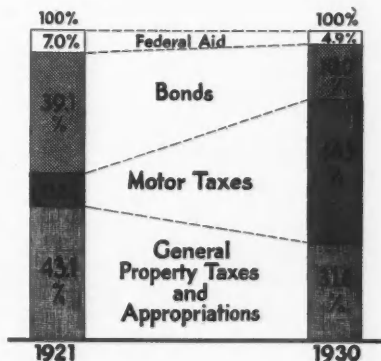


\*97.8% of state bonds were issued against income from motor vehicles so that the 19.6% should be added to the 61.7% from special motor taxes, making a total of 81.3% from motor vehicle sources. From 1921 to 1930, 78% of all state bonds issued were against income from motor taxes, according to the U. S. Bureau of Public Roads.

## Special Motor Tax Share of State and Local Road Income Increased from 10.8% in 1921 to 46.5% in 1930

1930		Per Cent
Motor Vehicle Fees . . . . .	\$344,712,860	46.5
Gasoline Taxes . . . . .	518,220,155	
Gen. Prop. Taxes . . . . .	409,619,681	31.6
Appropriations . . . . .	128,331,635	
Miscellaneous . . . . .	50,421,897	17.0
Bonds . . . . .	316,972,789	
Federal Aid . . . . .	92,462,836	4.9
Total, 1930 . . . . .	\$1,860,741,853	100.
1921		Per Cent
Motor Vehicle Fees . . . . .	\$116,401,416	10.8
Gasoline Taxes . . . . .	3,513,460	
Gen. Prop. Taxes . . . . .	415,746,635	43.1
Appropriations . . . . .	477,951,619	
Miscellaneous . . . . .	62,204,984	39.1
Bonds . . . . .	434,572,734	
Federal Aid . . . . .	77,456,687	7.0
Total, 1921 . . . . .	\$1,109,895,916	100.

### State and Local Highway Income



## Highway Summary, U. S., 1931

Total mileage in United States.....	3,009,066
State highway system.....	324,500
County and local roads.....	2,684,500
Mileage surfaced.....	730,000
State highways.....	250,000
Local roads.....	480,000
High type surface.....	145,000
Mileage surfaced 1931 ( <small>Reconstructed sur- facing included</small> ).....	72,000
Expenditures—1931.....	\$1,700,000,000
Street construction and maintenance.....	\$ 500,000,000

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### Federal Aid System

Total approved miles.....	196,877
Total mileage completed with Federal Aid...	88,713
Constructed 1931 ( <small>Fiscal year</small> ) ( <small>Stage construction and reconstruction included</small> ).....	11,033
Total improved forest road mileage.....	4,638
Annual Federal Aid authorization.....	\$ 125,000,000
Federal Aid payments to states ( <small>1931 Fis- cal year</small> ).....	133,340,910



# Total Highway Mileage by States

(Figures from United States Bureau of Public Roads, December 31, 1930)

STATES	TOTAL RURAL ROAD MILEAGE			MILES SURFACED ROADS		
	Total	State highways	Local roads	Total	State highways	Local roads
Alabama.....	67,907	5,526	62,381	19,784	3,588	16,196
Arizona.....	22,818	2,633	20,185	3,840	1,864	1,976
Arkansas.....	68,849	8,810	60,039	8,884	6,866	2,018
California.....	76,964	6,589	70,375	25,647	4,482	21,165
Colorado.....	68,974	9,234	59,740	7,588	4,375	3,213
Connecticut.....	14,256	2,234	12,022	3,712	2,139	1,573
Delaware.....	3,779	817	2,962	1,258	817	441
Florida.....	30,366	6,663	23,703	15,395	3,794	11,601
Georgia.....	102,284	7,124	95,160	14,922	3,916	11,006
Idaho.....	39,825	4,565	35,260	9,766	2,759	7,007
Illinois.....	97,287	9,889	87,398	22,815	7,703	15,112
Indiana.....	73,768	6,111	67,657	52,034	5,986	46,048
Iowa.....	103,328	7,685	95,643	20,088	6,536	13,552
Kansas.....	132,240	8,690	123,550	7,027	4,240	2,787
Kentucky.....	61,261	15,000	46,261	17,654	8,154	9,500
Louisiana.....	35,553	10,509	25,044	12,203	7,549	4,654
Maine.....	20,882	2,039	18,843	6,227	1,886	4,341
Maryland.....	14,847	3,253	11,594	6,308	3,253	3,055
Massachusetts.....	18,802	1,624	17,178	9,682	1,624	8,058
Michigan.....	81,106	8,109	72,997	26,281	7,557	18,724
Minnesota.....	110,661	6,891	103,770	37,217	6,794	30,423
Mississippi.....	61,957	6,101	55,856	17,950	5,337	12,613
Missouri.....	110,540	8,446	102,094	14,326	5,638	8,688
Montana.....	67,072	8,148	58,924	3,870	1,846	2,024
Nebraska.....	93,907	9,752	84,155	6,386	4,784	1,602
Nevada.....	23,576	3,774	19,802	2,444	1,741	703
New Hampshire.....	12,034	2,548	9,486	3,060	2,434	626
New Jersey.....	17,393	1,873	15,520	9,442	1,841	7,601
New Mexico.....	47,776	9,334	38,442	3,014	2,671	343
New York.....	82,375	14,015	68,360	34,278	11,244	23,034
North Carolina.....	53,796	8,705	45,091	21,956	7,730	14,226
North Dakota.....	106,846	7,401	99,445	4,026	3,183	843
Ohio.....	85,106	11,343	73,763	50,836	11,254	39,582
Oklahoma.....	120,879	6,395	114,484	5,307	3,341	1,966
Oregon.....	51,617	4,352	47,265	13,931	3,604	10,327
Pennsylvania.....	90,867	13,501	77,366	27,081	9,495	17,586
Rhode Island.....	2,739	1,009	1,730	1,092	571	521
South Carolina.....	57,726	5,993	51,733	18,802	4,866	13,936
South Dakota.....	120,271	5,976	114,295	7,096	3,984	3,112
Tennessee.....	67,953	7,044	60,909	18,018	5,960	12,058
Texas.....	188,539	18,703	169,836	26,424	10,808	15,616
Utah.....	23,655	3,436	20,219	4,451	1,904	2,547
Vermont.....	15,031	4,204	10,827	5,075	3,552	1,523
Virginia.....	59,957	7,688	52,269	12,581	5,602	6,979
Washington.....	43,881	3,248	40,633	16,870	2,847	14,023
West Virginia.....	34,799	4,164	30,635	5,292	3,087	2,205
Wisconsin.....	81,784	10,221	71,563	29,632	9,365	20,267
Wyoming.....	41,233	3,127	38,106	1,987	1,650	337
Total, U. S.....	3,009,066	324,496	2,684,570	693,559	226,221	467,338

# Rural Highway Mileage Surfaced Annually

## State, County and Local

(Figures from U. S. Bureau of Public Roads, Calendar Years)

	1923	1924	1925	1926	1927	1928	1929	1930
Alabama.....	1,140	927	397	1,632	853	878	1,520	1,573
Arizona.....	322	266	130	156	120	288	133	295
Arkansas.....	454	641	686	661	305	759	1,579	1,857
California.....	787	727	836	1,171	4,123	2,496	2,556	2,388
Colorado.....	312	388	427	547	307	322	300	524
Connecticut.....	171	153	125	276	145	200	172	201
Delaware.....	110	67	84	97	52	264	161	132
Florida.....	1,717	851	1,033	2,533	1,873	1,085	847	326
Georgia.....	500	719	501	1,235	1,672	779	295	296
Idaho.....	363	476	654	667	973	1,160	723	1,137
Illinois.....	1,457	1,531	1,104	1,094	1,233	1,801	1,390	1,710
Indiana.....	1,399	1,996	1,010	1,316	1,326	1,279	1,310	1,349
Iowa.....	825	780	992	2,030	2,852	3,247	2,971	3,130
Kansas.....	1,031	168	478	604	1,163	1,190	2,358	2,681
Kentucky.....	947	438	467	688	1,177	1,108	1,171	1,237
Louisiana.....	711	728	509	1,637	1,259	679	490	1,511
Maine.....	324	395	326	187	448	498	524	531
Maryland.....	345	278	335	336	306	347	379	466
Massachusetts.....	172	189	219	237	287	643	610	581
Michigan.....	1,569	2,224	1,003	1,341	1,397	1,882	1,788	1,834
Minnesota.....	2,176	2,009	2,446	5,040	4,194	3,943	4,291	5,120
Mississippi.....	1,300	378	898	1,783	1,189	1,491	2,009	1,901
Missouri.....	557	1,213	2,845	950	727	613	1,233	1,720
Montana.....	307	129	259	453	263	484	361	300
Nebraska.....	57	563	1,144	1,155	1,424	724	947	711
Nevada.....	149	301	261	228	161	307	239	351
New Hampshire.....	112	100	150	195	176	221	312	351
New Jersey.....	249	340	489	546	526	928	954	920
New Mexico.....	186	419	173	93	259	264	363	811
New York.....	2,111	1,876	2,067	2,394	2,138	1,995	2,465	2,865
North Carolina.....	1,105	901	1,704	2,439	1,739	1,198	1,349	2,174
North Dakota.....	345	147	593	660	567	759	746	712
Ohio.....	1,552	971	2,066	5,200	3,198	2,876	3,354	2,914
Oklahoma.....	187	322	305	529	296	452	448	515
Oregon.....	1,129	218	788	899	302	263	509	452
Pennsylvania.....	1,237	1,179	1,700	1,525	1,508	541	1,132	1,987
Rhode Island.....	53	57	86	84	74	158	172	139
South Carolina.....	638	834	970	1,695	1,222	2,242	1,686	1,654
South Dakota.....	572	477	881	701	734	803	1,414	1,123
Tennessee.....	877	641	785	933	1,214	923	1,589	2,680
Texas.....	1,623	1,003	1,385	2,722	1,013	2,338	1,426	1,468
Utah.....	92	176	181	365	372	1,024	418	359
Vermont.....	142	195	274	255	256	209	192	164
Virginia.....	207	264	753	689	674	400	554	547
Washington.....	698	331	809	1,070	820	337	261	916
West Virginia.....	231	252	402	818	693	660	710	950
Wisconsin.....	3,659	2,100	6,058	3,513	5,640	2,999	4,252	4,609
Wyoming.....	135	210	117	146	128	308	212	232
Total Surfaced.....	36,344	31,548	41,905	55,525	53,430	50,465	54,875	63,247
Earth, graded & imp.....	10,382	13,690	15,796	60,059	33,031	24,318	23,128	24,370
Grand total.....	46,726	45,238	57,701	115,584	86,461	74,783	78,003	87,717

# Highway Expenditures by States

Including Interest on Bonds Outstanding

	STATE		COUNTY AND LOCAL		TOTAL	
	1929	1930	1929	1930	1929	1930
Alabama .....	\$18,271,180	\$13,902,198	\$9,738,537	\$10,956,834	\$28,009,717	\$24,859,032
Arizona .....	4,385,501	5,050,367	1,995,793	2,477,157	6,381,294	7,527,524
Arkansas .....	25,487,511	29,962,445	6,455,000	4,440,000	31,942,511	34,402,445
California .....	28,577,468	35,965,692	29,676,722	31,276,344	58,254,190	67,242,036
Colorado .....	6,361,665	7,364,231	5,435,906	5,917,808	11,797,571	13,282,039
Connecticut .....	12,751,248	14,351,803	3,349,324	3,600,407	16,100,572	17,952,210
Delaware .....	2,735,010	2,310,762	1,675,146	1,606,674	4,410,156	3,917,436
Florida .....	10,702,163	9,804,306	14,817,713	17,257,204	25,519,876	27,061,512
Georgia .....	7,038,986	12,699,282	10,096,773	11,174,396	17,135,759	23,873,678
Idaho .....	2,979,839	6,197,275	4,842,775	5,211,956	7,822,614	11,409,231
Illinois .....	37,708,842	38,351,004	28,384,484	33,035,000	66,093,326	71,386,004
Indiana .....	20,677,796	22,556,447	27,608,308	26,899,500	48,286,104	49,455,947
Iowa .....	34,772,545	48,369,274	24,775,603	24,439,815	59,548,148	72,809,089
Kansas .....	14,062,713	13,224,735	20,185,200	19,320,452	34,237,913	32,545,187
Kentucky .....	15,109,839	19,457,987	6,125,000	6,175,000	21,234,839	25,632,987
Louisiana .....	16,997,006	28,717,297	9,000,000	6,850,000	25,997,006	35,567,297
Maine .....	12,040,785	14,743,431	2,740,000	3,110,000	14,780,785	17,853,431
Maryland .....	10,979,790	14,442,277	4,060,629	5,450,057	15,040,419	19,892,334
Massachusetts .....	13,846,158	14,927,731	12,735,000	12,340,173	26,581,158	27,267,904
Michigan .....	34,512,336	33,910,020	41,397,896	41,425,000	75,910,232	75,335,020
Minnesota .....	19,740,618	24,317,708	23,506,557	24,142,600	43,247,175	48,460,308
Mississippi .....	4,682,676	4,566,736	18,560,381	22,010,519	23,243,057	26,577,255
Missouri .....	27,320,650	42,090,038	14,454,000	18,370,000	41,774,650	60,460,038
Montana .....	4,481,815	6,377,829	4,550,000	4,200,000	9,031,815	10,577,829
Nebraska .....	8,389,619	11,014,818	10,953,356	11,067,463	19,342,975	22,082,281
Nevada .....	2,646,895	2,497,009	635,048	714,857	3,281,943	3,211,866
New Hampshire .....	7,621,386	9,062,932	2,133,781	2,092,243	9,755,167	11,155,175
New Jersey .....	32,966,624	37,040,095	19,387,180	24,290,596	52,353,804	61,330,691
New Mexico .....	6,369,816	8,576,556	475,789	484,169	6,845,605	9,060,745
New York .....	62,023,618	67,062,205	45,000,000	54,800,000	107,023,618	121,862,205
North Carolina .....	20,682,110	19,027,657	16,858,980	11,818,554	37,541,090	30,846,211
North Dakota .....	4,129,072	3,991,730	4,942,250	3,600,000	9,071,322	7,591,730
Ohio .....	30,281,207	42,011,991	40,304,653	48,964,329	70,585,860	90,976,320
Oklahoma .....	11,766,255	20,203,764	12,750,000	11,351,700	24,516,255	31,555,464
Oregon .....	9,502,834	11,794,194	11,830,000	9,180,000	21,332,834	20,974,194
Pennsylvania .....	51,904,445	85,140,523	44,253,545	60,606,163	96,157,990	145,746,686
Rhode Island .....	4,949,502	2,840,080	929,858	1,138,964	5,879,360	3,979,044
South Carolina .....	15,372,739	17,655,655	9,051,919	8,394,518	24,424,658	26,050,173
South Dakota .....	5,060,487	5,914,760	7,843,068	6,485,617	12,903,555	12,400,377
Tennessee .....	27,740,999	39,107,516	10,443,007	14,563,959	38,184,006	53,671,475
Texas .....	33,680,701	46,595,709	23,000,000	22,762,400	56,680,701	69,358,109
Utah .....	4,106,131	4,705,793	1,237,419	1,607,196	5,343,550	6,312,989
Vermont .....	12,516,284	8,612,503	844,840	593,000	13,361,124	9,205,503
Virginia .....	13,953,848	17,444,546	8,225,280	7,966,424	22,179,128	25,710,970
Washington .....	12,734,216	12,174,906	8,975,000	10,510,000	21,709,216	22,684,906
West Virginia .....	15,872,417	20,265,274	12,163,670	11,040,780	28,036,087	31,306,054
Wisconsin .....	16,283,862	19,805,854	25,324,153	33,612,251	41,608,015	53,418,105
Wyoming .....	3,107,137	3,470,900	1,063,098	1,163,149	4,170,235	4,634,049
Total .....	\$799,876,344	\$979,997,847	\$644,792,641	\$700,495,248	\$1,444,668,985	\$1,680,493,095

Figures cover expenditures on construction, maintenance, interest on bonds and notes outstanding, and miscellaneous expenses, for rural road and bridge purposes.



# Every State Supplies Material

Largest purchaser of  
Employment, Direct and Indirect

→ One out of every 11



# Materials Used in Automotive Industry

of several commodities  
direct, Over 4,000,000 Persons  
11 gainful workers

oil  
hides

seed oil

axseed  
ed oil  
wool

hides  
um  
ed oil  
zinc

36,276  
7,115  
60  
zinc  
petroleum  
lead  
hides  
cotton

306  
290  
petroleum  
des sulphur  
bon black

E 30,850  
S 5943  
F 50

iron ore  
linseed oil  
lumber  
hides  
wool

E 52,529  
S 6645  
F 136

lumber  
hides  
iron ore  
excelsior

E 29,985  
S 7195  
F 42

hides wool  
linseed oil  
flaxseed

E 49,342  
S 8377  
F 102

lead zinc  
lacquers  
tungsten  
hides

E 13,117  
S 3056  
F 11

lumber  
bauxite  
petroleum  
manganese

E 24,447  
S 3050  
F 21

cotton  
sulphur  
carbon black  
lumber  
sugar cane

E 105,611  
S 13,899  
F 435

steel pig iron  
lacquers  
chemicals  
coal  
leather

E 73,928  
S 7871  
F 161

steel pig iron  
plate glass

E 200,736  
S 15,167  
F 477

pig iron lacquer  
paint

E 19,584  
S 3343  
F 25

lumber  
coal  
glass  
lacquers  
paint

E 23,820  
S 3057  
F 14

lumber  
bauxite  
cotton

E 16,525  
S 3167  
F 3

cotton  
iron ore  
steel  
turpentine

E 22,435  
S 4527  
F 12

cotton fabrics  
bauxite  
manganese  
turpentine

E 21,040  
S 4826  
F 2

cotton  
lumber  
turpentine  
sugar cane

E 400,912  
S 10,404  
F 261

iron ore  
lumber  
copper  
brass  
lacquers  
leather

E 112,491  
S 16,505  
F 531

metal refineries  
chemicals  
varnish  
lacquer  
tannin

E 12,021  
S 2642  
F 5

plate glass  
steel  
iron  
plate glass  
aluminum

E 19,478  
S 3971  
F 11

lumber  
coal  
glass  
emery  
excelsior

E 22,697  
S 5865  
F 9

cotton fabrics  
mica  
silica  
cotton

E 9638  
S 2616  
F 3

cotton  
fabrics

E 151,072  
S 19,985  
F 534

iron  
metal  
refineries  
chemicals  
varnish  
lacquer  
tannin

E 3232  
S 1068  
F 3

talc  
excelsior  
silica  
lacquer  
fabrics  
mohair  
wool  
upholstery

E 12,491  
S 16,505  
F 531

chemicals  
leather  
brass  
copper  
zinc

E 27,390  
S 3464  
F 95

E 62,858  
S 7683  
F 142

E 27,390  
S 3464  
F 95

E 16,431  
S 2356  
F 15

E 16,431  
S 2356  
F 15

E 16,431  
S 2356  
F 15

E 16,431  
S 2356  
F 15

E 16,431  
S 2356  
F 15

E 16,431  
S 2356  
F 15

E 6302  
S 1834  
F 2

paper  
lumber  
mica  
mohair

E 4846  
S 1282  
F 5

E 52,497  
S 7455  
F 167

E 6770  
S 1326  
F 23

E 27,390  
S 3464  
F 95

E 62,858  
S 7683  
F 142

E 16,431  
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E 16,431  
S 2356  
F 15

# Raw Materials Used in

## Automobile Industry Largest Purchaser of Several Commodities

Forms of Steel or Iron	Percent Used by Motor Industry	Rank as Consumer
Strips .....	60.3%	First
Bars .....	29.7%	First
Sheets .....	29.0%	First
Malleable iron .....	54.0%	First
Alloy steel† .....	72.0%	First

Commodity	Percent Used by Motor Industry	Rank as Consumer
Gasoline.....	85.0%	First
Rubber .....	81.6%	First
Plate glass .....	60.0%	First
Nickel .....	32.0%	First
Lead .....	35.8%	First
Mohair .....	28.0%	First
Upholstery leather.....	51.0%	First

	Amount Used in Manufacturing and Repairs
*Steel (gross tons) .....	2,950,000
Production of finished rolled steel .....	18,500,000
Per cent used in automobile industry .....	16%
Iron, malleable (tons) .....	210,000
Production.....	390,000
Per cent used in motor vehicles .....	54%
Gray iron (tons) .....	466,450
Production.....	6,000,000
Per cent used in manufacturing motor vehicles in U. S.....	7.8%
Rubber (long tons) .....	282,782
Total consumption of crude rubber.....	346,684
Per cent used in motor vehicles .....	81.6%
Plate glass (square feet) .....	52,200,000
Production of polished plate glass.....	86,973,320
Per cent used in motor vehicles .....	60%

\*Figures from Iron Age.    †Figures from "Steel."

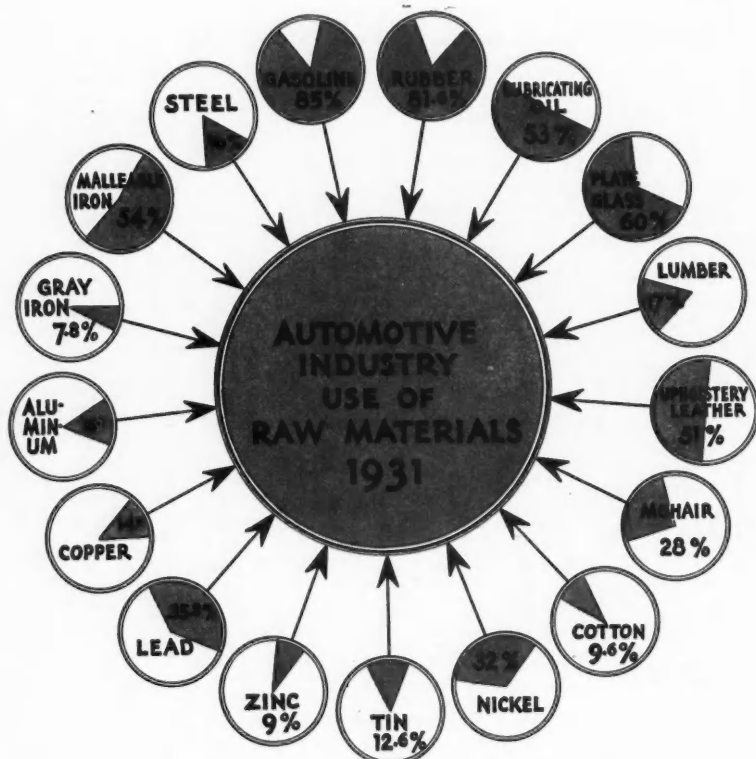


# Automobile Industry, 1931

	Amount Used in Manufacturing and Repairs
Lumber, hardwood (board feet).....	510,000,000
Production of hardwoods.....	3,000,000,000
Per cent used in motor vehicles.....	17%
Leather, upholstery (square feet).....	14,425,000
Production of upholstery leather.....	28,250,000
Per cent used in motor vehicles.....	51%
Aluminum (tons).....	14,000
Production.....	89,000
Per cent used in motor vehicles.....	15.7%
Copper (tons).....	73,600
Total mine production in United States.....	520,000
Per cent used.....	14.2%
Tin (long tons).....	8,000
Total deliveries in United States.....	63,450
Per cent used in motor vehicles.....	12.6%
Lead (tons).....	147,300
Primary smelter production.....	411,000
Per cent used in motor vehicles.....	35.8%
Zinc (tons).....	27,000
Production of slab zinc.....	301,000
Per cent used in motor vehicles.....	9.0%
Nickel (pounds).....	8,000,000
United States consumption.....	25,000,000
Per cent used in motor vehicles.....	32%
‡ Cotton (bales).....	412,200
United States consumption.....	5,448,780
Per cent used in tire and motor vehicle manufacturing.....	7.6%
Mohair (pounds).....	5,000,000
Production.....	17,860,000
Per cent used in automobile upholstery.....	28%
Lumber, softwood (board feet).....	88,300,000
‡ Cloth, upholstery (yards).....	24,800,000
‡ Top and side curtain material (yards).....	9,250,000
‡ Paint and lacquer (gallons).....	9,560,000
‡ Hair and padding (pound's).....	31,680,000
<hr/>	
Gasoline (gallons).....	14,400,000,000
Domestic consumption total (Bureau of Mines).....	16,945,110,000
Per cent used by motorists (estimated).....	85%
Lubricating oil (gallons).....	450,000,000
Domestic consumption total (Bureau of Mines).....	842,730,000
Per cent used by automobile industry.....	53%
Antifreeze solutions (gallons).....	35,000,000
Brake lining (asbestos and cotton) linear feet.....	86,600,000

‡United States motor vehicle manufacturing use only.

(Continued on following page)



## Additional Raw Materials Used in Motor Industry

No attempt has been made to estimate quantities used  
of each material

Sulphuric Acid	Soda ash	Platinum	Soap	Machine Tools	Asbestos
Hydrochloric Acid	Caustic soda	Gold	Celluloid	Coal	Carborundum
Alkali	Turpentine	Silver	Chamois	Gas	Emery
Carbon Black	White lead	Mercury	Polish	Fuel oil	Garnet
Acetylene	Formaldehyde	Radium	Paper	Electricity	Silicon
Butanol	Phenol	Tungsten	Cork	Wool	Onyx
Cellulose Acetate	Arsenic	Phosphorus	Charcoal	Silk	Agate
Sulphur	Litharge	Molybdenum	Flaxseed	Hemp	Talc
Carbon	Cadmium	Magnesium	Linseed Oil	Jute	Silica sand
Nitro-cellulose	Alcohol	Vanadium	Animal Fat	Canvas	Limestone
Pyroxylin	Glycerine	Bismuth	Corn	Felt	Salt
Resin	Glue	Porcelain	Sugar cane	Moss	Tanning mat's
Shellac	Rope	Mica	Borax	Curled hair	Dyes

**Automotive freight represented 1 out of every 8 carloads of traffic originated on railroads in 1931.**

# Automotive Employment, 4,030,000

9 1/2% of "Gainful Workers" in United States

## EMPLOYED DIRECTLY

Motor vehicle factory workers	270,464
Tire, parts and accessory factory workers.....	175,000
Dealers and salesmen, motor vehicles, parts, accessories, tires.....	350,000
Garage and repair shop employees.....	410,000
Bus, taxi and private chauffeurs.....	380,000
Truck drivers.....	1,510,000
Automobile financing, insurance, advertising and miscellaneous.....	15,000
<b>Total directly employed...</b>	<b>3,110,464</b>

## EMPLOYED INDIRECTLY

Gasoline refining and retailing	425,000
Iron and steel workers.....	45,000
Non-ferrous metal workers...	10,000
Railroad and steamship workers.....	75,000
Lumber and woodworkers....	6,000
Electric power and fuel workers.....	4,000
Highways.....	325,000
Miscellaneous other raw material suppliers.....	30,000
<b>Total indirectly employed.</b>	<b>920,000</b>
<b>GRAND TOTAL.....</b>	<b>4,030,000</b>

## Where the Highway Dollar Goes

Labor Receives Directly and Indirectly 77 Cents Out of Every Dollar Expended for Roads

(Analysis by U. S. Bureau of Public Roads. See Public Roads for April, 1932)

Distribution of \$1,000 paid for concrete highway, showing the approximate total amount which reaches labor in each of seven successive steps

### (1) Contractor's distribution of \$1,000 expended

1. Labor.....	\$141.00
2. Aggregates.....	324.00
3. Cement.....	324.00
4. Steel.....	27.00
5. Equipment.....	100.00
6. Plant installation.....	27.00
7. Bonding, etc.....	22.00
8. Gross profit.....	35.00
	<b>\$1,000.00</b>

### (2) After distribution of contractor's charges

1. Salaries and wages.....	\$302.70
2. Freight.....(1)	406.70
3. Materials and supplies.....(1)	30.15
4. Fuel.....	35.50
5. Interest.....	14.10
6. Taxes.....	24.10
7. Depreciation and repairs.....(1)	118.15
8. Depletion.....	10.50
9. Profit.....	48.10
10. For redistribution.....	10.00
	<b>\$1,000.00</b>

### (3) After distribution of freight charges

1. Salaries and wages.....	\$477.70
2. Materials and supplies.....	70.55
3. Fuel.....	57.20
4. Interest, rents, etc.....	61.70
5. Taxes.....	49.70
6. Depreciation and repairs.....	171.65
7. Profit.....	91.00
8. Depletion.....	10.50
9. For redistribution.....	10.00
	<b>\$1,000.00</b>

### (4) After distribution of fuel costs

1. Salaries and wages.....	\$516.00
2. Materials and supplies.....	77.20
3. Interest, rents, etc.....	63.75
4. Taxes.....	51.40
5. Depreciation and repairs.....	175.75
6. Profit.....	91.00
7. Depletion.....	14.90
8. For redistribution.....	10.00
	<b>\$1,000.00</b>

### (5) After distribution of depreciation and cost of repairs

1. Salaries and wages.....	\$568.70
2. Materials and supplies.....	176.45
3. Interest, rents, etc.....	65.50
4. Taxes.....	55.80
5. Depletion.....	14.90
6. Profit.....	108.65
7. For redistribution.....	10.00
	<b>\$1,000.00</b>

### (6) After distribution of cost of materials and supplies

1. Salaries and wages.....	\$730.90
2. Interest, rents, etc.....	73.95
3. Taxes.....(2)	39.45
4. Depletion.....	17.95
5. Profit.....	127.75
6. For redistribution.....	10.00
	<b>\$1,000.00</b>

### (7) After distribution of taxes and \$10 for redistribution

1. Salaries and wages.....	\$771.50
2. Interest, rents, etc.....	81.30
3. Profit.....	129.05
4. Reserve for depletion.....	18.15
	<b>\$1,000.00</b>

(1) These items adjusted for freight charges assignable to materials, supplies, replacements, and repairs.

(2) This item adjusted for amount transferred to materials and supplies.

## Capital Invested in Automobile Manufacturing

Year	Cars	Trucks	Total*
1919.....	\$784,660,761	\$230,782,577	\$1,015,443,338
1920.....	897,953,600	306,425,000	1,204,378,600
1921.....	1,134,166,000	289,334,000	1,423,500,000
1922.....	1,154,103,335	302,546,620	1,456,649,954
1923.....	1,281,364,300	290,358,100	1,571,722,400
1924.....	1,373,372,426	317,677,686	1,691,050,112
1925.....	1,503,290,062	384,738,748	1,888,028,810
1926.....	1,646,589,759	442,908,566	2,089,498,325
1927.....	1,643,989,116	436,668,548	2,080,657,664
1928.....	1,578,021,207	387,289,301	1,965,310,508
1929.....	1,518,714,814	437,972,847	1,956,687,661
1930.....	1,442,275,653	438,532,580	1,880,808,233
1931.....	1,257,251,910	380,655,544	1,637,907,454

\*The above figures represent net tangible assets of United States motor vehicle manufacturers, and do not include parts, accessory, body and tire manufacturers.

## Employment and Wages in Motor Vehicle Factories\*

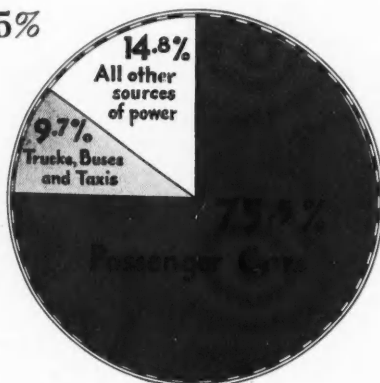
Year	Number	Wages	Year	Number	Wages
1920.....	244,700	\$490,160,000	1926.....	375,281	\$657,724,859
1921.....	186,000	299,098,780	1927.....	324,665	585,823,733
1922.....	253,104	395,707,531	1928.....	402,138	712,567,699
1923.....	318,098	579,002,686	1929.....	427,459	775,478,810
1924.....	329,563	547,215,700	1930.....	325,124	647,588,438
1925.....	361,442	649,668,829	1931.....	270,464	397,207,034

\*Figures cover United States motor vehicle manufacturers only; they do not include parts, accessory body or tire factories.

## Motor Vehicles Furnish 85% of Nation's Horse-Power

(Figures from Carroll R. Daugherty,  
University of Pittsburgh)

	Horsepower	Percent
Motor Vehicles, total..	1,424,980,000	85.20
Pleasure cars.....	1,261,297,000	75.50
Motorcycles.....	1,200,000	.....
Trucks, buses, taxis..	162,483,000	9.70
Steam railroads.....	109,331,000	6.56
Agriculture.....	49,151,000	2.95
Electric central station..	43,000,000	2.58
Manufacturing.....	20,092,000	1.20
Ships.....	8,896,000	.53
Mines and quarries.....	8,000,000	.48
Electric railroads.....	2,550,000	.15
Irrigation and drainage...	1,383,000	.08
Commercial aircraft....	3,091,000	.19
Work animals not on farms	1,400,000	.08
Total.....	1,671,874,000	100%



# Automobile Industry Ranks First



(Source: 1929 Census of Manufactures)

Industry	Value of Products
1. Motor vehicles.....	\$3,722,793,274
2. Meat packing, wholesale.....	3,434,654,098
3. Steel works and rolling mills.....	3,365,788,805
4. Foundry and machine shop products.....	2,791,461,964
5. Printing and publishing.....	2,760,195,928
6. Petroleum refining.....	2,639,665,001
7. Electrical machinery.....	2,300,915,572
8. Clothing, women's, (not elsewhere classified).....	1,709,580,505
9. Motor vehicle bodies and parts.....	1,537,929,793
10. Bread and other bakery products.....	1,526,110,811

## Automotive Manufactures One-Eighth of Total

(Source: 1929 Census of Manufactures)

Industry	Number of Wage Earners	Salaries and Wages	Value of Products	Value Added by Manufacture
Motor Vehicle....	253,192	\$446,445,205	\$3,722,793,274	\$1,321,281,511
Motor Vehicle				
Parts & Bodies.....	241,273	424,166,797	1,537,929,793	680,944,156*
Rubber Tires.....	96,244	158,179,577	770,176,890	340,569,919*
Petroleum Refining	94,393	164,754,867	2,639,665,001	608,323,593
Total Automotive.....	685,102	\$1,193,546,446	\$8,670,564,958	\$2,951,119,179
All Manufactures.....	10,330,728	\$15,216,037,315	\$70,434,863,443	\$31,885,283,711
Per cent				
Automotive.....	6.6%	7.8%	12.3%	9.3%

\*Some duplication occurs between the motor bodies and parts industry and the motor vehicle industry in that a portion of the former is also included in the latter in the form of original equipment, but this duplication likewise occurs in the figure for all manufactures. The percentages, therefore, represent fairly closely the facts.

# Summary of State

(Prepared by the Albert Russel Erskine Bureau for Street Traffic Research,

STATES	DRIVING SPEEDS in miles per hour				LICENSE REQUIREMENTS				No pass- ing on hill or curves <sup>1</sup>	Coast- ing in neutral proh- ibited
	Maxi- mum	Resi- dence dist.	Busi- ness dist.	Curves and Inter- sec- tions	Driver's	For non-residents				
						A	B	Mini- mum age		
Alabama.....	45	20	20	15	No	No	No	16	Yes	Yes
Arizona.....	35	15	10	...	Yes	No	No	18	Yes	Yes
Arkansas.....	35	20	15-20	15	No	No	No	...	Yes	Yes
California.....	45	25	20	15	Yes	Yes	Yes	16	Yes	Yes
Colorado.....	35	20	15	...	No	No	No	15	Yes	No
Connecticut.....	*	...	...	...	Yes	No	Yes	16	Yes	No
Delaware.....	40	25	...	...	Yes	No	No	16	Yes	Yes
Dist. of Columbia.....	30	22	22	...	Yes	No	†Yes	16	†Yes	Yes
Florida.....	*	...	...	...	No	No	No	...	Yes	No
Georgia.....	40	...	...	...	No	No	No	16	Yes	No
Idaho.....	35	20	15	15	No	No	No	16	Yes	Yes
Illinois.....	45	20	15	12	No	No	No	15	...	No
Indiana.....	*	30	20	...	Yes	No	No	16	Yes	No
Iowa.....	*	25	15	...	Yes	No	No	15	...	...
Kansas.....	*	*	*	15	Yes	Yes	No	16	...	...
Kentucky.....	40	20	15	...	No	No	No	16	...	...
Louisiana.....	45	20	20	15	No	No	No	14	Yes	Yes
Maine.....	*	25	25	15	Yes	Yes	Yes	15	Yes	Yes
Maryland.....	40	25	20	12	Yes	No	†Yes	16	Yes	No
Massachusetts.....	*30	*20	*20	*15	Yes	No	†Yes	16	†Yes	No
Michigan.....	*	20	15	...	Yes	No	No	14	Yes	Yes
Minnesota.....	45	20	15	15	No	No	No	15	Yes	Yes
Mississippi.....	30	15	15	10	No	No	No	...	No	No
Missouri.....	*25	...	...	...	No	No	No	16	Yes	Yes
Montana.....	*	...	...	...	No	No	No	16	No	No
Nebraska.....	45	...	...	...	Yes	No	No	16	Yes	Yes
Nevada.....	*	20-25	...	...	Yes	No	No	15	No	Yes
New Hampshire.....	35	20	20	15	Yes	No	Yes	16	Yes	Yes
New Jersey.....	40	20	20	15	Yes	No	No	17	No	No
New Mexico.....	45	25	20	15	No	No	No	...	Yes	Yes
New York.....	40	20	20	...	Yes	No	†Yes	18	Yes	No
North Carolina.....	45	20	15	...	No	No	No	16	Yes	Yes
North Dakota.....	50	25	20	20	No	No	No	...	Yes	Yes
Ohio.....	45	35	20	...	No	No	No	...	...	...
Oklahoma.....	45	...	...	...	No	No	No	...	...	...
Oregon.....	*	25	25	15	Yes	No	No	16	Yes	Yes
Pennsylvania.....	40	20	20	20	Yes	No	No	16	Yes	Yes
Rhode Island.....	35	20	20	*	Yes	No	†Yes	16	...	...
South Carolina.....	45	...	...	*	Yes	No	No	12	No	No
South Dakota.....	40	20	15	15	No	No	No	15	Yes	Yes
Tennessee.....	*	...	...	...	No	No	No	...	Yes	No
Texas.....	45	20	20	...	No	No	No	...	No	No
Utah.....	30	...	...	...	No	No	No	16	Yes	No
Vermont.....	*	...	...	...	Yes	No	†Yes	16	Yes	No
Virginia.....	45	25	15	25	No	No	No	...	Yes	Yes
Washington.....	40	25	25	15	Yes	No	No	15	No	Yes
West Virginia.....	45	25	20	...	Yes	†Yes	Yes	15	Yes	No
Wisconsin.....	*	20	15	*	Yes	No	No	16	Yes	No
Wyoming.....	*	†	†	*	No	No	No	15	...	No

\*—Reasonable and proper. †—Municipal laws cover. ‡—Reciprocal privileges granted certain states.  
A—To drive own cars. B—To drive cars registered in state visited. 1—Where view ahead is obstructed.  
2—Must leave 15-ft. clearance for passing. 3—City ordinances. 4—Unless at safety zone. 5—Where official stop sign is erected. 6—On wet pavement. 7—Restricted. 8—When accident occurs in town.

# Motor Vehicle Regulations

for the American Automobile Association)

DRIVING TECHNICALITIES											INCIDENTAL REQUIREMENTS		STATES
Un-lawful to park on highway	Passing street car prohibited	When taking or disc. pass.	Must use hand signals	Full stop at R. R.	Must dim head-lights	Spot-lights per-mitted	Report accident	Prop-erty dam-age	Stick-ers per-mitted	Un-lawful to throw out cigar-ettes			
Yes	Yes	*Yes	Yes	Yes	No	Yes	No	No	No	No			Alabama
Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes			Arizona
Yes	Yes	*Yes	Yes	Yes	Yes	Yes	Yes	<sup>12</sup> Yes	No	....			Arkansas
Yes	Yes	*Yes	Yes	No	No	<sup>17</sup> Yes	Yes	Yes	<sup>14</sup> Yes	Yes			California
Yes	Yes	*Yes	Yes	No	Yes	Yes	*No	*No	No	No			Colorado
Yes	No	Yes	Yes	No	No	<sup>17</sup> Yes	Yes	<sup>11</sup> Yes	No	No			Connecticut
Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No			Delaware
Yes	Yes	*Yes	Yes	*Yes	No	Yes	Yes	No	No	No			Dist. of Col.
Yes	Yes	*Yes	Yes	Yes	Yes	Yes	<sup>18</sup> No	No	Yes	No			Florida
No	Yes	*Yes	Yes	Yes	No	Yes	No	No	Yes	No			Georgia
Yes	Yes	Yes	Yes	*Yes	No	Yes	Yes	Yes	No	Yes			Idaho
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	....			Illinois
Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No			Indiana
.....	.....	*Yes	Yes	.....	.....	Yes	Yes	.....	.....	No			Iowa
.....	.....	.....	.....	.....	Yes	No	Yes	.....	Yes	No			Kansas
Yes	No	Yes	Yes	*Yes	No	Yes	No	No	Yes	No			Kentucky
Yes	Yes	Yes	Yes	No	Yes	.....	Yes	Yes	Yes	No			Louisiana
Yes	No	Yes	No	No	No	<sup>17</sup> Yes	Yes	Yes	.....	No			Maine
Yes	Yes	Yes	Yes	No	No	Yes	Yes	No	.....	No			Maryland
Yes	.....	.....	Yes	No	No	Yes	Yes	No	Yes	No			Massachusetts
Yes	Yes	Yes	Yes	No	Yes	Yes	No	No	No	No			Michigan
Yes	Yes	*Yes	Yes	*Yes	No	<sup>17</sup> Yes	No	No	No	.....			Minnesota
*No	.....	.....	Yes	No	No	Yes	No	No	Yes	No			Mississippi
.....	No	*Yes	Yes	.....	Yes	<sup>a</sup> Yes	Yes	Yes	.....	.....			Missouri
.....	.....	.....	Yes	No	.....	Yes	Yes	Yes	No	No			Montana
Yes	Yes	Yes	Yes	No	Yes	<sup>17</sup> Yes	No	*No	.....	No			Nebraska
Yes	.....	.....	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes			Nevada
Yes	.....	.....	No	No	Yes	Yes	Yes	No	Yes	.....			N. Hampshire
No	Yes	Yes	Yes	No	No	<sup>17</sup> Yes	Yes	Yes	No	.....			New Jersey
*Yes	.....	.....	Yes	*Yes	Yes	Yes	Yes	<sup>11</sup> Yes	.....	.....			N. Mexico
Yes	Yes	*Yes	Yes	No	No	Yes	Yes	No	No	No			New York
Yes	Yes	Yes	Yes	No	No	No	Yes	Yes	No	.....			N. Carolina
Yes	Yes	*Yes	Yes	*Yes	Yes	Yes	*Yes	*Yes	No	.....			N. Dakota
Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No	No			Ohio
No	.....	.....	.....	No	.....	No	*No	No <sup>b</sup>	.....	.....			Oklahoma
*Yes	Yes	*Yes	Yes	No	*Yes	Yes	Yes	Yes	No	Yes			Oregon
No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	<sup>12</sup> Yes	No			Pennsylvania
No	No	.....	.....	No	No	Yes	Yes	<sup>13</sup> Yes	No	Yes			Rhode Island
Yes	*Yes	*Yes	No	No	No	<sup>17</sup> Yes	No	No	.....	.....			S. Carolina
Yes	.....	.....	Yes	*Yes	No	Yes	Yes	Yes	No	Yes			S. Dakota
Yes	Yes	Yes	No	Yes	No	<sup>b</sup> Yes	No	No	Yes	.....			Tennessee
Yes	.....	Yes	Yes	No	No	Yes	No	Yes	No	No			Texas
Yes	Yes	*Yes	Yes	No	No	Yes	Yes	Yes	No	No			Utah
Yes	.....	Yes	Yes	No	No	Yes	Yes	Yes	No	No			Vermont
Yes	Yes	*Yes	Yes	No	No	Yes	Yes	<sup>19</sup> Yes	No	No			Virginia
Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No	Yes			Washington
Yes	Yes	Yes	Yes	No	No	Yes	Yes	No	Yes	No			W. Virginia
*No	Yes	Yes	No	No	No	No	No	No	No	.....			Wisconsin
No	Yes	Yes	No	No	No	Yes	*Yes	*Yes	Yes	No			Wyoming

<sup>a</sup>—Cities require report. <sup>12</sup>—When damage is over \$10.00. <sup>11</sup>—Damage over \$25.00. <sup>13</sup>—Damage over \$50.00. <sup>14</sup>—Damage over \$100.00. <sup>15</sup>—7 inches square maximum. <sup>a</sup>—Not in cities. <sup>b</sup>—Must be distinguished when approaching vehicle is in sight.

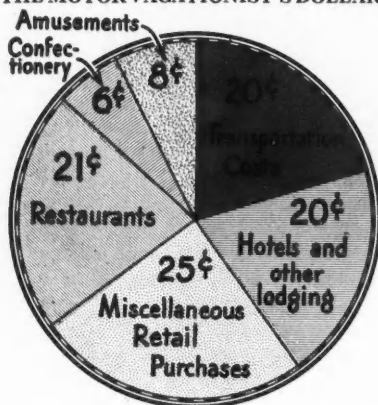
## Vacation Motor Travel Expenditures Over \$3 Billion in 1931

(Estimates by the American Automobile Association based on figures from official and private sources)

THE MOTOR VACATIONIST'S DOLLAR

### Motor Camping and Vacation Motor Travel Expenditures

United States .....	\$2,750,000,000
Americans in Canada .....	285,000,000
Americans in Mexico .....	25,000,000
Americans touring abroad .....	50,000,000
<b>1931 Expenditures...</b>	<b>\$3,110,000,000</b>



## Growth of Local Bus Service in Cities Over 10,000

(Figures from "Bus Transportation")

	1922	1931	% Increase
Number of places.....	819	982	19.9
Places with buses <i>and</i> trolleys.....	177	414	133.8
Places with buses <i>only</i> .....	15	259	1,626.6
Places with <i>no</i> local bus service.....	627	309	— 50.7
Number of railway bus operators.....	52	236	353.8
Number of independent bus operators.....	2,871	**1,270	— 56.7
Number of buses in local service.....	*4,795	**14,041	192.8
Miles of local bus routes.....	1,563	10,596	577.9

\*Exclusive of jitneys in Spartansburg and Columbia, S. C., Atlanta and Savannah, Ga., Detroit, Mich., and St. Louis, Mo.

\*\*Does not include 400 service cars operating in St. Louis, Mo.





# 51,500 Buses in School Use

(Figures as of December 31, 1931 from "Bus Transportation")

	No. of Schools	No. of Buses	Miles of Route	Children Carried	Cost of Service
<b>New England</b>					
Connecticut.....	240	475	2,850	11,900	508,173
Maine.....	96	190	1,330	6,650	171,000
Massachusetts.....	442	1,035	6,727	26,910	931,500
New Hampshire.....	132	215	1,505	4,300	203,500
Rhode Island.....	100	105	875	2,600	104,000
Vermont.....	65	127	1,431	2,595	102,900
<b>Central Atlantic</b>					
District of Columbia.....	4	12	85	207	20,000
Delaware.....	361	771	1,600	6,500	235,000
Maryland.....	387	1,255	7,530	31,873	772,319
New Jersey.....	460	705	5,640	18,330	1,757,000
New York (outside).....	610	1,015	6,100	20,300	587,265
Pennsylvania.....					574,475
<b>Southeast</b>					
Alabama.....	600	2,200	13,200	66,500	1,403,000
Florida.....	260	1,150	9,045	35,000	1,000,000
Georgia.....	360	1,400	12,600	40,000	770,000
North Carolina.....	1,266	3,960	54,000	181,494	2,273,287
South Carolina.....	690	1,669	19,640	43,958	921,122
Virginia.....	230	1,493	7,465	69,431	1,096,043
<b>Mid-West</b>					
Illinois.....	175	275	2,475	7,400	245,000
Indiana.....	905	6,372	90,000	155,203	4,592,662
Iowa.....	323	2,411	12,055	40,987	1,467,150
Kentucky.....	32	155	1,395	4,650	93,000
Michigan.....	332	865	5,172	25,860	690,600
Ohio.....	930	5,020	40,160	150,600	4,200,000
West Virginia.....	230	362	3,000	9,050	217,200
Wisconsin.....	600	700	6,000	12,337	575,000
<b>Gulf Southwest</b>					
Arkansas.....	152	1,220	10,950	47,000	795,000
Louisiana.....	700	2,335	16,500	78,142	1,960,833
Mississippi.....	960	2,800	25,200	84,000	1,120,000
Missouri.....	53	125	1,130	3,125	93,500
Oklahoma.....	429	1,480	15,749	58,376	1,154,433
Tennessee.....	260	825	9,075	20,625	535,760
Texas.....	340	725	10,875	21,750	435,000
<b>Central Northwest</b>					
Minnesota.....	425	1,530	9,590	31,150	1,143,800
Montana.....	101	360	4,320	7,200	216,000
North Dakota.....	357	526	7,890	15,759	751,973
South Dakota.....	43	176	1,320	3,880	120,400
<b>West Mid-Continent</b>					
Colorado.....	168	570	5,400	12,450	356,000
Kansas.....	236	494	7,403	6,995	217,113
Nebraska.....	84	415	2,905	12,450	373,500
Wyoming.....	200	440	8,500	8,735	400,000
<b>Pacific Southwest</b>					
Arizona.....	46	290	3,500	4,400	174,000
California.....	534	1,670	10,020	50,100	1,502,500
Nevada.....	26	112	1,680	2,800	771,400
New Mexico.....	239	430	8,250	10,783	404,267
Utah.....	120	383	4,550	13,405	417,470
<b>Pacific Northwest</b>					
Idaho.....	65	385	5,750	9,625	182,500
Oregon.....	100	300	2,100	6,000	336,092
Washington.....	908	1,578	13,949	50,332	1,723,631
<b>B. T. Census Total</b>	<b>16,426</b>	<b>55,306</b>	<b>506,063</b>	<b>1,583,917</b>	<b>\$40,696,368</b>
<b>Estimated Total, U. S.</b>	<b>16,700</b>	<b>*51,500</b>	<b>500,000</b>	<b>1,585,000</b>	<b>\$40,750,000</b>

\*About 4,000 buses in school service are operated part time as common carriers, and consequently are included in the figure for that service.





# 42,200 Revenue

(From "Bus Transportation")

STATES	TOTAL REVENUE CARRIERS					INTERSTATE CARRIERS				
	No. of Cos.	No. of Vehicles			Miles of Route	No. of Cos.	No. of Vehicles			Miles of Route
All Veh-icles		Buses	Tour-ing Cars	All Veh-icles			Buses	Tour-ing Cars		
<b>New England</b>										
Connecticut.....	77	763	753	10	3,229	20	100	100	....	1,000
Maine.....	37	98	69	29	1,212	5	15	15	....	300
Massachusetts.....	127	2,180	2,145	35	11,327	20	150	135	15	3,500
New Hampshire.....	31	144	129	15	1,453	3	19	19	....	103
Rhode Island.....	26	343	297	46	3,098	18	197	157	40	4,033
Vermont.....	62	208	142	66	1,760	16	66	54	12	404
<b>Central Atlantic</b>										
Delaware.....	2	59	58	1	140	....	....	....	....	....
Dist. of Columbia.....	18	356	356	....	1,410	3	54	54	....	450
Maryland.....	71	650	630	20	6,135	10	25	25	....	1,000
New Jersey.....	800	5,759	5,559	200	8,000	67	1,567	1,567	....	2,500
New York.....	280	2,127	2,058	69	10,455	12	202	202	....	1,500
(outside city)										
New York City.....	485	2,247	2,247	....	4,145	15	150	150	....	2,500
Pennsylvania.....	425	4,240	4,190	50	19,966	20	150	150	....	8,000
<b>Southeast</b>										
Alabama.....	97	251	176	75	5,141	5	25	25	....	600
Florida.....	50	464	414	50	7,200	4	10	10	....	200
Georgia.....	95	466	391	75	3,919	9	25	25	....	500
North Carolina.....	57	477	421	56	6,312	15	75	45	30	1,200
South Carolina.....	28	146	118	28	4,011	1	12	12	....	437
Virginia.....	120	819	728	91	4,700	15	35	35	....	500
<b>Mid-West</b>										
Illinois.....	105	1,808	1,802	6	18,710	25	250	250	....	5,000
Indiana.....	145	1,005	935	70	7,550	15	150	140	10	1,500
Iowa.....	40	362	342	20	7,849	5	65	65	....	3,000
Kentucky.....	120	645	600	45	5,584	15	100	90	10	1,000
Michigan.....	150	1,903	1,903	....	15,672	20	100	100	....	4,500
Ohio.....	245	2,308	2,208	100	15,500	20	135	135	....	3,000
West Virginia.....	63	575	525	50	5,076	20	150	130	20	1,000
Wisconsin.....	62	597	597	....	5,550	10	80	80	....	1,000
<b>Gulf Southwest</b>										
Arkansas.....	51	323	230	93	5,250	1	8	5	3	150
Louisiana.....	38	381	331	50	6,197	2	5	5	....	200
Mississippi.....	17	119	89	30	1,557	4	10	10	....	500
Missouri.....	55	963	899	64	14,373	10	360	350	10	4,000
Oklahoma.....	35	490	330	160	8,653	7	15	15	....	2,500
Tennessee.....	65	465	410	55	5,903	7	29	24	5	700
Texas.....	148	1,322	1,202	120	33,468	5	50	50	....	3,000
<b>Central Northwest</b>										
Minnesota.....	23	483	480	3	11,000	2	66	66	....	4,000
Montana.....	24	163	153	10	2,475	1	3	3	....	300
North Dakota.....	17	50	37	13	2,129	5	20	16	4	700
South Dakota.....	32	190	179	11	2,975	2	8	7	1	250
<b>West Mid-Continent</b>										
Colorado.....	115	475	415	60	7,547	9	100	50	50	2,000
Kansas.....	42	350	320	30	7,756	8	75	70	5	2,500
Nebraska.....	29	450	422	28	10,022	2	250	235	15	6,200
Wyoming.....	23	384	358	26	3,910	7	20	15	5	500
<b>Pacific Southwest</b>										
Arizona.....	130	414	219	195	7,050	8	60	50	10	2,500
California.....	285	2,969	2,619	350	45,662	15	250	200	50	30,000
Nevada.....	8	43	38	5	1,753	2	5	5	....	250
New Mexico.....	33	166	116	50	2,357	1	2	2	....	300
Utah.....	26	262	216	46	3,438	2	50	38	12	1,000
<b>Pacific Northwest</b>										
Idaho.....	49	157	130	27	3,862	8	25	23	2	350
Oregon.....	57	546	506	40	7,994	10	100	100	....	2,000
Washington.....	118	748	709	39	7,662	10	140	125	15	2,000
<b>B. T. Census Totals ..</b>	<b>5,238</b>	<b>42,913</b>	<b>40,201</b>	<b>2,712</b>	<b>388,097</b>	<b>516</b>	<b>5,558</b>	<b>5,234</b>	<b>324</b>	<b>111,627</b>
<b>Estimated Total**...</b>	<b>5,250</b>	<b>45,400</b>	<b>42,200*</b>	<b>3,200</b>	<b>390,000</b>	<b>520</b>	<b>5,600</b>	<b>5,250</b>	<b>350</b>	<b>112,000</b>

\*Total includes 14,050 city buses and 20,090 intercity intrastate buses, not tabulated.

\*\*Computed on basis of census with allowance for bus operations not included in actual count.

# Motor Buses

Census as of December 31, 1931)



MOTOR CARRIERS No. of Vehicles					ELECTRIC R. R. AND SUBSIDIARIES			STEAM R. R. AND SUBSIDIARIES			
No. of Cos.	All Vehicles	Buses	Touring Cars	Miles of Route	No. of Cos.	Buses	Miles of Route	No. of Cos.	Buses	Miles of Route	
76	400	390	10	989	1	246	565	...	117	1,675	New England
35	73	44	29	894	1	5	57	1	20	261	Connecticut
112	1,189	1,154	35	8,299	13	842	1,418	2	149	1,610	Maine
30	114	99	15	1,022	1	5	11	...	25	420	Massachusetts
24	142	96	46	2,524	1	146	199	1	55	375	New Hampshire
62	196	130	66	1,727	...	...	...	...	12	33	Rhode Island
											Vermont
1	3	2	1	10	1	56	130	...	...	...	Central Atlantic
15	180	180	...	1,171	3	176	239	...	...	...	Delaware
67	487	467	20	5,997	3	160	108	1	3	30	Dist. of Col.
794	3,225	3,025	200	4,881	5	2,508	2,818	1	26	301	Maryland
261	1,612	1,543	69	9,459	17	491	812	2	24	184	New Jersey
											New York
482	1,709	1,709	...	3,917	3	509	217	...	29	11	(outside city)
396	3,338	3,288	50	17,844	26	842	1,205	3	60	917	New York City
											Pennsylvania
95	232	157	75	4,980	2	15	11	...	4	150	Southeast
46	376	326	50	7,131	4	88	66	...	...	3	Alabama
87	355	280	75	3,420	1	91	89	7	20	410	Florida
49	394	338	56	6,036	5	71	86	3	12	190	Georgia
25	130	102	28	3,988	2	13	12	1	3	11	North Carolina
113	504	413	91	4,447	6	312	235	1	3	18	South Carolina
											Virginia
85	1,292	1,286	6	16,511	16	474	865	4	42	1,334	Mid-West
131	570	500	70	6,503	14	435	1,047	...	...	...	Illinois
32	215	195	20	6,471	7	116	292	1	31	1,086	Indiana
116	562	517	45	5,503	3	79	72	1	4	9	Iowa
143	1,061	1,061	...	14,190	7	842	1,482	...	...	...	Kentucky
225	1,521	1,421	100	14,280	20	787	1,220	...	...	...	Michigan
58	457	407	50	3,945	4	80	528	1	38	603	Ohio
52	253	253	...	3,357	8	333	1,926	2	11	267	West Virginia
											Wisconsin
46	160	67	93	3,111	2	14	13	3	149	2,126	Gulf Southwest
35	326	276	50	5,771	3	50	50	...	5	376	Arkansas
15	80	50	30	1,490	2	39	67	...	...	...	Louisiana
48	660	596	64	12,501	7	199	284	...	104	1,588	Mississippi
31	329	169	160	8,367	4	161	286	...	...	...	Missouri
56	374	319	55	5,272	6	62	366	3	29	265	Oklahoma
134	930	810	120	31,136	11	356	530	3	36	1,802	Tennessee
											Texas
19	352	349	3	10,380	2	124	180	2	7	440	Cent. Northwest
23	158	148	10	2,471	1	5	4	...	...	...	Minnesota
15	42	29	13	2,115	2	8	14	...	...	...	Montana
32	189	178	11	2,970	...	...	...	...	1	5	North Dakota
											South Dakota
112	381	321	60	6,358	2	47	57	1	47	1,132	West Mid.-Cont.
37	211	181	30	6,844	5	122	142	...	17	770	Colorado
26	293	265	28	7,973	2	62	73	1	95	1,976	Kansas
23	364	338	26	3,460	...	...	...	...	20	450	Nebraska
											Wyoming
127	386	191	195	6,869	2	11	20	1	17	161	Pacific Southwest
267	2,207	1,857	350	43,921	14	745	1,321	4	17	420	Arizona
6	8	3	5	988	...	...	...	2	35	765	California
32	158	108	50	2,199	...	...	...	1	8	158	Nevada
23	144	98	46	1,935	3	20	86	...	98	1,417	New Mexico
											Utah
49	117	90	27	2,562	...	...	...	...	40	1,300	Pacific Northwest
55	436	396	40	7,037	1	52	48	1	58	909	Idaho
109	482	443	39	6,075	8	239	736	1	27	851	Oregon
											Washington
4,932	29,377	26,665	2,712	341,301	251	12,038	19,987	55	1,498	26,809	B. T. Cen. Tot.
4,944	31,850	28,650	3,200	343,000	251	12,050	20,000	55	1,500	27,000	Est. Total

# 98,900 Motor Buses in U. S.—1931

(Figures as of December 31st, 1931 from "Bus Transportation")

	REVENUE	1927	1928	1929	1930	1931
1. City.....		.....	.....	12,750	13,350	14,050
2. Intercity.....		.....	.....	21,150	23,550	22,750
Total intrastate (1 + 2).....		30,600	33,150	33,900	36,900	36,800
3. Interstate.....		3,200	3,750	6,000	5,000	5,600
Total common carriers (1 + 2 + 3).....		33,800	36,900	39,900	41,900	42,400
4. Sightseeing.....		2,750	2,750	2,750	2,750	3,000
Total (1 + 2 + 3 + 4)		36,550	39,650	42,650	44,650	45,400
NON-REVENUE						
5. Schools*.....		35,900	40,875	42,000	45,000	51,500
6. Hotel.....		1,000	800	750	750	700
7. Industrial.....		1,100	1,000	1,000	1,000	900
8. Miscellaneous.....		400	400	400	400	400
Total (5 + 6 + 7 + 8)		38,400	43,075	44,150	47,150	53,500
Grand total.....		74,950	82,725	86,800	91,800	98,900
a. Motor carriers.....		27,064	28,332	29,940	31,064	31,850
b. Electric railways....		8,492	10,062	11,256	11,827	12,050
c. Steam railroads.....		994	1,256	1,454	1,759	1,500

\*4,000 or more buses in school service are operated part time as common carriers, and consequently are included in the figure for that service.

## 10,880,000 Bus Passenger-Miles in 1931

(Figures from "Bus Transportation")

	In Millions					
Passenger - miles (revenue buses only).....	1926	1927	1928	1929	1930	1931
City service.....	7,825	8,800	10,300	10,985	11,280	10,880
Intercity service.....	3,450	3,900	4,515	4,038	4,050	3,975
Passengers carried (revenue buses only).....	4,375	4,900	5,535	6,797	7,080	6,725
City service (revenue only)....	1,405	1,585	1,836	1,774	1,784	1,726
Intercity service.....	1,150	1,300	1,505	1,346	1,350	1,325
Passengers carried, school buses....	255	285	321	422	428	395
Other non-common carriers.....	280	300	360	400	460	500
	20	22	24.8	18.8	18.8	17

# Bus Census by States—1925-1931

(This is a compilation of statistics obtained as a result of actual censuses conducted by "Bus Transportation." Figures indicated for the 1931 census may be accepted as embracing approximately 94 per cent of the bus operation in the United States on December 31, 1931. Due to improvement of census machinery "Bus Transportation" has been enabled to present a more comprehensive picture of the nation's bus operations with each succeeding year.)

	1925	1926	1927	1928	1929	1930	1931
Alabama.....	693	796	825	1,230	1,225	2,379	2,376
Arizona.....	214	458	346	387	434	608	509
Arkansas.....	303	300	336	587	861	1,441	1,450
California.....	3,361	3,862	3,815	3,989	4,195	4,349	4,289
Colorado.....	774	981	1,141	1,157	1,299	1,504	985
Connecticut.....	867	950	977	920	1,227	1,214	1,228
Delaware.....	146	171	194	221	206	211	258
District of Columbia.....	278	339	464	302	327	344	368
Florida.....	1,134	1,353	1,364	1,599	1,507	1,671	1,564
Georgia.....	644	837	971	1,020	1,484	1,505	1,791
Idaho.....	477	348	357	441	485	536	515
Illinois.....	1,546	2,113	2,279	2,230	2,493	2,390	2,077
Indiana.....	2,731	5,070	6,187	6,676	7,044	7,071	7,307
Iowa.....	1,301	1,408	1,451	1,602	1,990	1,952	2,753
Kansas.....	577	700	781	700	784	841	814
Kentucky.....	378	560	408	599	652	764	755
Louisiana.....	2,040	1,615	1,725	1,787	2,458	2,665	2,666
Maine.....	192	371	361	324	307	314	259
Maryland.....	529	654	723	895	853	1,289	1,401
Massachusetts.....	1,930	2,226	2,643	2,822	2,915	3,064	3,180
Michigan.....	1,592	2,092	2,171	2,539	2,828	2,785	2,768
Minnesota.....	930	1,617	1,575	1,814	1,800	1,978	2,010
Mississippi.....	2,027	1,822	1,876	3,176	3,208	3,227	2,889
Missouri.....	817	836	865	879	833	781	924
Montana.....	768	468	450	493	505	512	513
Nebraska.....	307	412	464	484	503	639	837
Nevada.....	86	99	124	206	180	151	150
New Hampshire.....	163	400	220	285	338	355	344
New Jersey.....	2,366	3,718	4,434	4,892	5,630	6,434	6,814
New Mexico.....	210	290	297	323	376	396	546
New York.....	.....	.....	4,051	4,416	4,456	4,720	5,010
New York (outside N.Y.C.).....	3,263	3,988	2,416	2,503	2,607	2,819	2,763
New York City.....	.....	.....	1,635	1,913	1,849	1,901	2,247
North Carolina.....	2,800	2,868	3,506	3,688	4,211	4,513	4,381
North Dakota.....	1,050	809	808	953	860	564	563
Ohio.....	3,930	4,234	4,476	4,765	4,740	4,882	7,228
Oklahoma.....	1,072	1,254	1,286	1,467	1,458	1,507	1,810
Oregon.....	887	694	994	831	714	840	806
Pennsylvania.....	2,487	3,053	3,409	3,556	3,607	3,759	5,205
Rhode Island.....	187	357	299	305	285	394	402
South Carolina.....	405	323	329	1,043	1,147	1,394	1,787
South Dakota.....	188	402	395	336	422	357	355
Tennessee.....	595	907	983	1,064	1,069	1,119	1,235
Texas.....	1,137	1,188	1,498	1,720	1,856	1,847	1,927
Utah.....	443	508	472	483	469	583	599
Vermont.....	198	183	181	205	266	309	269
Virginia.....	1,254	1,588	1,834	1,805	2,116	2,183	2,221
Washington.....	1,436	1,778	1,837	1,740	1,740	2,281	2,287
West Virginia.....	814	637	712	769	868	884	887
Wisconsin.....	1,128	1,674	1,416	1,303	1,228	1,272	1,297
Wyoming.....	547	578	576	689	788	847	798
†United States Total	53,202	63,646	69,082	75,717	81,247	87,625	93,407

†These are actual counts, see note above.

# 1931 Export Summary

Foreign sales of motor vehicles of U. S. design.. 324,178

	Passenger Cars	Trucks	Total
U. S. Exports....	86,435	49,401	135,836
Foreign assemblies	47,613	58,108	105,721
Canadian Output.	65,093	17,528	82,621
Total.....	199,141	125,037	324,178

Percent of American production sold outside the United States (Including sales in Canada):

Cars.....	9.7%
Trucks.....	28.7%
Total.....	13.1%

World production of motor vehicles..... 3,042,069

Value of United States and Canadian exports (including tires, parts and accessories)..... \$186,248,775

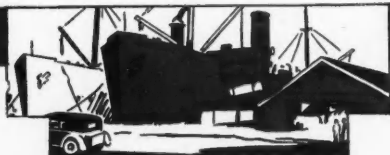
	Number Cars and Trucks	Value including tires, parts
United States....	241,557	\$173,155,225
Canada.....	13,813	\$13,093,550

Rank among United States exports of manufactured products..... Fourth

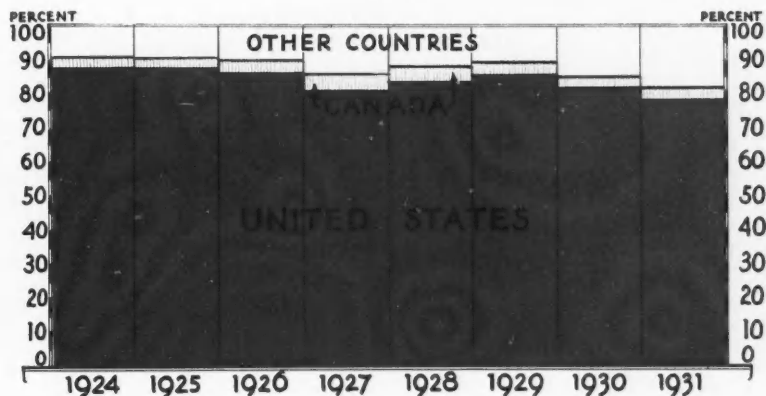
Leading export market (excepting Canada):

Passenger Cars.....	Belgium
Motor Trucks.....	Belgium

Motor vehicles imported into U. S. A..... 736



# American Motor Output 81% of World 1931



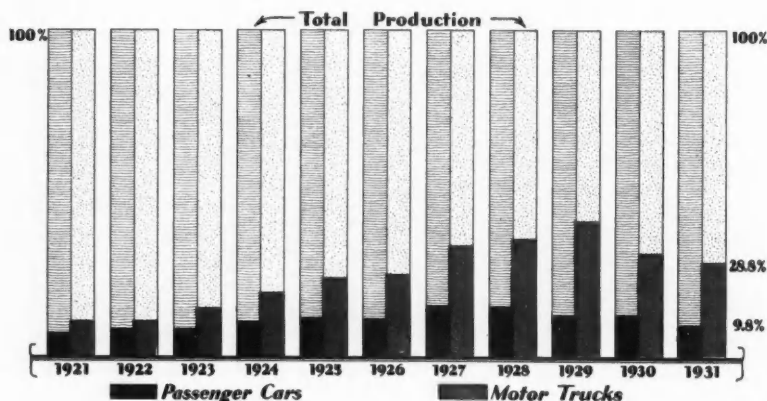
## World Production of Motor Vehicles

(Figures from Automotive Division, Department of Commerce)

Country	1925	1926	1927	1928	1929	1930	1931
Austria.....	4,900	5,290	8,700	11,930	9,110	3,200	4,200
Belgium.....	5,639	6,000	6,500	8,150	7,000	4,700	3,200
Canada.....	161,970	204,727	179,054	242,382	263,295	154,192	82,621
Czechoslovakia....	5,000	7,000	10,200	13,150	14,740	16,840	16,980
Denmark.....	75	200	190	165	150	230	180
England.....	167,000	198,699	211,780	211,877	233,925	234,571	223,219
France.....	177,000	193,315	191,300	207,519	248,000	230,700	196,860
Germany.....	49,384	37,169	96,640	89,950	80,500	70,044	65,459
Hungary.....	398	388	382	460	632	841	237
Italy.....	39,573	54,760	64,559	55,010	54,100	42,685	31,480
Japan.....			205	470	215	371	531
Poland.....				320	450	288	200
Russia.....			510	799	1,706	7,972	23,400
Spain.....	473	1,050	585	325	450	450	250
Sweden.....	270	410	1,250	1,362	1,758	2,400	2,444
Switzerland...	450	1,046	1,585	1,700	3,000	1,000	1,070
U. S.†.....	4,265,830	4,300,934	3,401,326	4,358,759	5,358,420	3,355,986	2,389,738
Total.....	4,877,962	5,010,988	4,174,766	5,204,328	6,277,451	4,126,470	3,042,069

†Including motor vehicles exported as "parts for assembly."

## 13% of American Production Sold Outside United States



Year	Passenger Cars	Motor Trucks	Total	Year	Passenger Cars	Motor Trucks	Total
1921..	7.3%	10.7%	7.7%	1927...	15.5%	34.1%	18.1%
1922..	8.5%	10.6%	8.8%	1928...	15.3%	35.5%	17.9%
1923..	8.1%	18.1%	9.1%	1929...	13.7%	40.9%	17.7%
1924..	10.1%	21.5%	11.4%	1930...	12.8%	31.0%	15.9%
1925..	11.6%	24.9%	13.3%	1931...	9.8%	28.8%	13.1%
1926..	11.4%	25.8%	13.2%				

## Sales of American Motor Vehicles Outside United States

Year	PASSENGER CARS			MOTOR TRUCKS			Total Motor Vehicles
	U. S. Exports Inc. For. Assemblies	Canadian Output	Total Cars	U. S. Exports Inc. For. Assemblies*	Canadian Output	Total Trucks	
1921..	51,050	61,098	112,148	12,569	5,148	17,717	129,865
1922..	108,426	94,904	203,330	22,473	7,149	29,622	232,952
1923..	175,158	129,228	304,386	60,025	17,210	77,235	381,621
1924..	217,169	117,765	334,934	75,980	17,481	93,461	428,395
1925..	316,093	135,573	451,666	112,594	26,397	138,991	590,657
1926..	289,135	164,856	453,991	104,309	39,871	144,180	598,171
1927..	331,959	146,827	478,786	137,509	32,227	169,736	648,522
1928..	418,845	196,741	615,586	163,919	45,641	209,560	825,146
1929..	451,079	207,498	658,577	283,132	55,797	338,929	997,506
1930..	247,764	125,442	373,206	157,951	28,750	186,701	559,907
1931..	134,048	65,093	199,141	107,509	17,528	125,037	324,178

\*The foreign assembly figures included here are also included in the factory sales figures compiled by the U. S. Census Bureau.



# Exports from Producing Countries

(Figures from Bureau of Foreign and Domestic Commerce)

Country	1926	1927	1928	1929	1930	1931
Austria .....	1,321	1,621	*3,563	*2,858	1,474	932
Belgium .....	3,075	2,870	3,366	2,723	933	436
Canada .....	74,324	57,414	79,388	101,711	44,553	13,813
Czechoslovakia ..	460	932	1,518	1,389	1,494	1,179
England .....	33,116	35,692	32,540	42,011	29,806	24,257
France .....	59,770	52,053	44,106	49,025	31,112	26,317
Germany .....	2,202	4,062	7,991	7,784	5,665	11,405
Hungary .....	6	15	28	0	.....	.....
Italy .....	34,191	33,312	28,280	23,689	20,737	11,918
Netherlands .....	326	316	287	↑	.....	.....
Spain .....	119	107	63	↑	60	26
Sweden .....	.....	.....	.....	75	150	.....
Switzerland .....	146	149	341	170	160	156
§United States .....	392,893	466,384	582,731	733,816	405,715	241,557

†Not available.

\*Includes chassis.

§Including units exported as "parts for assembly."

## Value of Automotive Exports—U. S. and Canada

	1926	1927	1928	1929	1930	1931
<b>Passenger Cars</b>						
United States .....	\$182,094,181	\$214,271,418	\$269,393,369	\$239,626,014	\$110,355,978	\$53,047,943
Canada .....	25,779,659	22,156,871	25,224,014	29,824,433	12,737,784	4,011,921
<b>Motor Trucks</b>						
United States .....	48,577,618	71,819,011	93,223,014	113,063,232	56,924,119	26,302,030
Canada .....	6,957,242	6,272,126	8,652,301	14,831,006	6,060,999	1,779,751
<b>Parts and Accessories</b>						
United States .....	79,562,120	89,651,904	118,255,604	170,952,592	114,688,185	72,607,577
Canada .....	5,485,486	3,434,465	2,152,166	2,350,232	1,587,571	829,838
<b>Tires, Rubber</b>						
United States .....	34,830,467	44,493,981	41,961,767	42,179,505	33,106,831	21,197,675
Canada .....	17,524,940	20,495,892	19,703,014	18,807,717	14,374,559	6,472,040
<b>Total</b>						
United States .....	\$345,064,386	\$420,236,314	\$522,833,754	\$565,821,343	\$315,075,113	\$173,155,225
Canada .....	55,747,327	52,359,354	55,731,495	65,813,388	34,760,913	13,093,550
<b>Grand Total .....</b>	<b>\$400,811,713</b>	<b>\$472,595,668</b>	<b>\$578,565,249</b>	<b>\$631,634,731</b>	<b>\$349,836,026</b>	<b>\$186,248,775</b>

\*Parts shipped to Canada for assembly have been deducted, but other "parts for assembly" have been included.

## World Motor Vehicle Registrations by Year†

Dec. 31	Outside United States	% Gain Yearly	United States	% Gain Yearly	World Total	% Gain Yearly	U. S. % of World
1916...	719,246	..	3,512,996	44	4,232,242	..	83
1919...	1,286,948	..	7,565,446	23	8,852,394	..	85
1920...	1,710,983	33	9,231,941	22	10,942,924	24	84
1921...	2,190,609	28	10,463,295	13	12,653,904	15	83
1922...	2,433,737	11	12,238,375	17	14,672,112	16	83
1923...	2,931,407	21	15,092,177	23	18,023,584	23	84
1924...	3,715,735	27	17,595,373	17	21,311,108	18	83
1925...	4,537,973	22	19,937,274	13	24,475,247	15	81
1926...	5,512,933	22	22,001,393	10	27,514,326	12	80
1927...	6,425,316	17	23,133,243	5	29,558,559	7	78
1928...	7,404,651	15	24,493,124	6	31,897,775	8	77
1929...	8,473,948	14	26,501,443	8	34,975,391	10	76
1930...	9,108,234	8	26,545,281	16	35,653,515	2	74
1931...	9,244,275	1.5	25,814,103	-2.8	35,058,378	-1.6	74

†For tabulation by countries in 1931 see pages 68-70.

# 35,058,000 Motor 74.% of Total in United States

(Figures as of December 31, 1931 from Automotive Division,

Country	Passenger Cars	Buses	Trucks	Total Regis- tration	Population per Motor Vehicle
Aden Protectorate.....	415	105	90	610	328
Aegean Islands (Italian Group)....	197	52	89	338	
Afghanistan.....	160		240	400	17,500
Alaska.....	1,892	1	659	2,552	23
*Albania.....	450			450	2,229
Algeria.....	39,000	1,700	6,600	47,300	137
*Angola.....	2,500			2,500	992
Antigua, Pres.....	228	5	32	265	113
*Arabia.....	500		250	750	9,333
Argentina.....	257,399	3,700	69,924	331,023	35
*Australia.....	407,911		117,935	525,846	12
Austria.....	18,530	2,350	14,700	35,580	189
Azores.....	615	60	40	715	324
Bahamas.....	813	10	227	1,050	51
*Barbados.....	1,350	138	183	1,671	101
Belgian Congo.....	3,600		3,300	6,900	1,449
Belgium.....	108,000	2,000	61,000	171,000	48
Bermuda.....	1		52	53	547
Bolivia.....	1,240	135	950	325	1,269
Borneo, Brit. North.....	122	87	41	250	1,032
Brazil.....	112,000	2,200	45,800	160,000	252
British East Africa:					
Kenya.....	8,888	300	2,475	11,663	218
Tanganyika.....	2,652	260	2,725	5,637	734
Uganda.....	3,236	350	2,138	5,724	538
Zanzibar.....	144	16	73	233	938
British Honduras.....	146		77	223	224
British South Africa:					
Basutoland.....	434		24	458	1,090
Nyassaland.....	775		550	1,325	1,003
Rhodesia, Northern.....	800	20	300	1,120	1,134
Rhodesia, Southern.....	13,033	54	1,818	14,905	69
British Southwest Protectorate.....	2,114	15	838	2,967	87
British West Africa:					
Gambia.....	87		170	257	778
Gold Coast.....	2,004	21	5,057	7,082	441
Nigeria.....	2,837		2,927	5,764	3,367
Sierra Leone.....	500	12	350	862	1,796
Bulgaria.....	1,906	502	854	3,262	1,822
Canada.....	1,024,385	1,729	180,722	1,206,836	8.6
Ceylon.....	14,805	2,330	2,904	20,039	276
Chile.....	26,575	1,860	12,284	40,719	105
China (including Hong Kong).....	27,350	5,894	8,259	41,503	10,595
Chosen.....	1,516	1,982	1,584	5,082	3,776
*Colombia.....	8,750	1,250	3,750	13,750	581
*Cook Island.....	72		56	128	
Costa Rica.....	1,345	99	323	1,767	292
Cuba.....	25,500	1,700	11,800	39,000	92
Cyprus.....	1,616			1,616	192
Czechoslovakia.....	58,000	3,600	30,000	91,600	161
Danzig.....	1,032	59	661	1,752	223
Denmark.....	86,430	1,280	34,800	122,510	29
Dominica.....	61	10	13	84	440
Dominican Republic.....	2,406	36	793	3,235	371
Ecuador.....	1,443	211	850	2,504	599
Egypt.....	24,268	1,252	3,848	29,368	508

\*Figures from the American Automobile's "1932 World Census."

# Vehicles in World

Decrease 595,137, or 1.6% in Year

Department of Commerce; and from The American Automobile\*)

Country	Passenger Cars	Buses	Trucks	Total Registration	Population per Motor Vehicle
Estonia.....	1,800	165	1,210	3,175	352
Ethiopia.....	250	7	68	325	30,769
Faroe Islands.....	36	.....	45	81	284
Fiji Islands.....	815	176	221	1,212	146
Finland.....	21,999	1,427	9,759	33,185	110
France.....	1,249,375	40,800	432,193	1,722,368	24
French Indo China.....	16,411	3,426	2,039	21,876	972
French West Africa.....	3,550	85	5,027	8,662	1,647
Germany.....	449,343	11,500	150,367	611,210	105
Gibraltar.....	532	43	94	669	25
Greece.....	12,000	1,400	4,500	17,900	357
Grenada.....	211	12	60	283	265
Guatemala.....	2,537	263	847	3,647	580
*Guiana, British.....	1,600	.....	300	1,900	161
*Guiana, French.....	65	.....	35	100	442
*Guiana, Dutch.....	200	.....	.....	200	696
Guam.....	181	11	210	402	32
Guadeloupe.....	1,170	130	130	1,430	176
*Haiti.....	2,350	280	370	3,000	766
Hawaii.....	39,568	305	10,419	50,292	7
Honduras.....	1,045	45	337	1,427	599
Hungary.....	11,716	653	4,883	17,252	503
Iceland.....	650	55	900	1,605	59
India.....	113,820	43,345	12,225	169,390	1,883
N. W. Indies.....	1,426	87	688	2,201	.....
Iraq.....	3,101	185	1,017	4,303	662
Irish Free State.....	43,100	850	9,200	53,150	55
Italy.....	211,844	9,078	73,321	294,243	143
Jamaica.....	6,131	86	1,723	7,940	109
Japan Empire (excl. Chosen).....	59,100	10,000	31,000	100,100	640
Latvia.....	2,174	334	1,403	3,911	486
Liberia.....	56	.....	44	100	15,000
Libya (Tripolitania).....	589	45	889	1,523	387
Lithuania.....	1,600	390	630	2,620	903
Luxemburg.....	6,247	130	2,776	9,153	33
Madagascar.....	2,636	.....	1,046	3,682	1,046
Madeira Islands.....	780	160	80	1,020	175
Malaya, British.....	27,647	1,916	6,751	36,314	45
Malta.....	1,704	533	282	2,519	92
Martinique.....	1,760	100	440	2,300	102
Mauritius.....	2,100	170	400	2,670	144
Mexico.....	49,457	4,051	13,564	67,072	245
Monaco.....	1,495	107	200	1,802	14
Montserrat.....	42	4	7	53	226
Morocco, French.....	14,188	958	3,827	18,793	225
Morocco, Int. Zone.....	425	58	185	668	90
Morocco, Spanish.....	1,815	320	1,430	3,565	238
Netherlands.....	76,100	3,736	46,003	125,839	63
*Netherlands East Indies.....	61,607	5,826	16,648	84,081	725
Netherlands West Indies.....	839	69	534	1,442	46
Newfoundland.....	2,792	14	590	3,396	81
New Hebrides.....	14	.....	52	66	910
New Zealand.....	152,601	1,232	38,034	191,867	8
Nicaragua.....	950	20	200	1,170	641
Norway.....	28,676	2,029	19,099	49,804	56
*Palestine.....	1,700	800	550	3,050	267
Panama and Canal Zone.....	7,043	553	523	8,119	58
Papua.....	75	.....	135	210	1,310

\*Figures from the American Automobile's "1932 World Census."

(Continued on following page)

# 35,069,000 Motor Vehicles in World

(Continued from preceding page)

Country	Passenger Cars	Buses	Trucks	Total Registration	Population per Motor Vehicle
Paraguay.....	784	231	1,000	2,015	419
Peria.....	4,550	400	5,000	9,950	1,005
Peru.....	6,275	406	4,170	10,850	575
Philippine Islands.....	25,203	3,094	12,436	40,733	301
Poland.....	19,000	2,000	8,500	29,500	1,063
Puerto Rico.....	10,984	239	2,933	14,156	109
Portugal.....	25,336	600	5,694	31,630	211
Portuguese East Africa.....	1,625	100	1,100	2,825	1,310
Portuguese West Africa.....	1,200	20	1,500	2,720	955
Reunion.....	868	15	280	1,163	161
Rumania.....	24,100	3,100	6,300	33,500	547
Russia, U.S.S.R.....	12,857	3,438	44,833	61,128	2,405
St. Kitts-Nevis.....	166	1	89	256	148
*St. Lucia.....	125	2	39	166	313
St. Pierre and Miquelon.....	50	.....	75	125	31
St. Vincent.....	38	2	7	47	.....
El Salvador.....	1,745	174	283	2,202	653
Samoa, American.....	23	6	25	54	189
Samoa, Western.....	169	17	113	299	154
Seychelles.....	58	.....	4	62	396
Siam.....	4,562	318	2,958	7,838	1,468
Society Islands.....	451	.....	63	514	61
Solomon Islands.....	.....	14	.....	14	.....
Somaliland and Eritrea.....	600	.....	500	1,100	1,680
Spain.....	122,730	.....	52,600	175,330	129
Spitzbergen.....	1	.....	.....	1	1,300
*Sudan.....	1,298	.....	1,547	2,845	1,927
Sweden.....	105,283	3,372	40,626	149,281	41
Switzerland.....	70,000	875	18,500	89,375	46
Syria.....	9,255	.....	2,562	11,817	240
Tonga.....	80	5	58	143	196
Trinidad and Tobago.....	4,800	400	1,800	7,000	57
Tunisia.....	10,320	160	1,475	11,955	183
Turkey.....	2,250	.....	3,400	5,650	2,451
United Kingdom:					
Channel Islands.....	5,750	.....	.....	5,750	16
Isle of Man.....	1,870	.....	.....	1,870	26
England.....	989,878	41,064	312,007	1,342,969	28
Scotland.....	89,543	5,204	31,199	125,946	38
Northern Ireland.....	21,302	776	6,909	28,987	43
Wales.....	46,366	2,846	15,439	64,651	40
Union of South Africa.....	138,625	1,500	17,130	157,255	51
United States.....	22,264,294	98,900	3,450,909	25,814,103	4.7
Uruguay.....	32,563	940	9,014	42,517	45
Venezuela.....	12,225	1,750	5,550	19,525	166
Virgin Islands.....	333	4	94	431	60
Yugoslavia.....	8,874	793	3,393	13,060	1,067
<b>WORLD TOTAL.....</b>	<b>29,083,480</b>	<b>358,139</b>	<b>5,616,759</b>	<b>35,058,378</b>	<b>57</b>

\*Figures from the American Automobile's "1932 World Census."



# World Gasoline Prices by Countries

## 1931 World Average Drops 5 Cents a Gallon Under 1930

(Figures from Minerals and Transportation Divisions, Department of Commerce)

In making comparisons among countries due consideration should be given to factors making for inequalities of prices, such as, distance from source of supply, quantity consumed, transportation costs, import duties, excise taxes, distribution and marketing costs and quality of product.

Country and City	Cents per U. S. Gallon		Country (Continued)	Cents per U. S. Gallon	
	1931	1930		1931	1930
Argentina, Buenos Aires..	\$26.8	\$28.0	India, Calcutta .....	\$30.4	\$39.0
Australia (tax 14 cts. per Imp. gal.) .....	*25.1	*42.2	Irish Free State, Dublin..	\$18.4	\$26.4
Austria, Vienna .....	23.3	*25.5	Italy, Av. 2 cities .....	31.4	40.7
Belgium, Brussels .....	22.2	*28.1	Japan, Tokyo .....	\$22.6	\$24.0
Bolivia, LaPaz .....	\$55.8	\$57.0	Mexico, Mexico City (road tax 6.8 cts.) .....	19.5	*26.5
Brazil, Para (Rio de Janeiro 1930) .....	\$31.8	\$45.0	Netherlands, The Hague ..	12.0	24.0
Bulgaria, Sofia .....	*24.8	*30.1	Norway, Oslo .....	15.6	23.4
Canada, Tor. (tax 5 cts.)..	21.2	23.3	Persia, Teheran .....	27.6	\$42.7
Chile, Santiago (tax 18.8 cts.) .....	*43.8	43.5	Peru, Lima (tax 9 cts.)..	\$26.0	\$38.0
China, Shanghai .....	*28.1	*32.7	Philippines, Manila (tax 7.6 cts.) .....	34.0	34.1
Columbia, Bogota (tax 8 cts.) .....	36.7	47.2	Poland, Warsaw .....	34.7	36.1
Cuba, Havana (duty 10 cts.) .....	28.0	27.0	Puerto Rico, San Juan (tax 7 cts.) .....	25.0	*22.0
Czechoslovakia, Prague ..	27.4	30.5	Rumania, Bucharest .....	16.1	26.1
Denmark, Copenhagen .....	*18.7	*28.5	Spain, Madrid .....	21.1	24.6
D. E. Indies, Batavia (tax 10.4 cts.) .....	33.0	*36.5	Sweden, Stockholm .....	22.0	26.5
Ecuador, Guayaquil .....	\$35.0	\$36.0	Switzerland, Zurich .....	25.5	29.9
Egypt, Port Said .....	\$26.8	\$31.0	United Kingdom (tax 8c. 1930; 16c. 1931 per Imp. gal.) .....	22.0	*28.6
Finland, Helsingfors .....	25.2	*29.6	U. S., Av. 50 cities (tax 3.8 cts. 1930; 4 cts. 1931)	17.0	19.9
France, Lyon .....	28.3	\$32.7			
Germany, Av. 4 cities .....	33.9	34.4	World Average .....	27.0	32.1

Prices are retail except where indicated by (\* or †).

\*Sold in bulk. †Sold in tins. (—): Gasoline or road tax included in price.

## 2.1 Per Cent Increase in Gasoline Use During 1931

(Figures from United States Bureau of Mines)

### THOUSANDS OF GALLONS

Year	United States Production	Imports	Exports	United States Consumption	Stocks Dec. 31
1921...	5,153,568	37,800	551,628	4,516,050	580,068
1922...	6,202,224	62,118	594,552	5,372,052	883,806
1923...	7,555,926	191,310	871,122	6,583,332	1,176,588
1924...	8,959,692	145,026	1,216,614	7,770,126	1,294,566
1925...	10,903,242	160,146	1,322,874	9,402,330	1,632,750
1926...	12,588,828	232,680	1,819,146	10,996,146	1,638,966
1927...	13,878,270	210,084	1,862,154	12,465,894	1,399,272
1928...	15,841,686	180,432	2,221,674	13,810,944	1,388,772
1929...	18,453,516	371,028	2,606,478	15,791,958	1,816,962
1930...	18,510,576	710,934	2,754,150	16,581,600	1,684,116
1931...	18,391,296	572,082	1,924,944	16,945,110	1,777,440

# 9,225,000 Miles of

(Compiled by Foreign Construction Division, Bureau of Foreign and Domestic Commerce.)

Country	Road Mileage	Area Sq. Mi.	Area to 1 Mile of Road	Auto- mobiles	Automobiles to 1 Mile of Road
<b>AMERICA</b>					
Alaska	1,751	590,884	337.5	3,002	1.7
Argentina	137,177	1,153,417	8.4	366,324	2.7
Bahamas	200	4,404	22.0	1,175	5.9
Barbados	475	166	.3	1,685	3.5
Bermuda	100	19	.2	52	.5
Bolivia	3,785	613,899	162.2	2,215	.6
Brazil	75,497	3,280,000	43.4	199,570	2.6
British Guiana	325	89,480	275.3	1,665	5.1
British Honduras	65	8,600	132.3	236	3.6
Canada	394,373	3,684,725	9.3	1,224,098	3.1
Chile	22,093	286,396	13.0	36,245	1.6
Colombia	19,261	497,300	25.8	13,750	.7
Costa Rica (excl. 1825 mi. of trails)	350	23,000	65.7	1,864	5.3
Cuba	2,441	44,164	18.1	41,222	16.9
Dominican Republic	2,345	19,332	8.2	3,561	1.5
Ecuador	3,810	174,000	45.7	2,419	.6
French Guiana	28	34,740	1,240.7	100	3.6
Guadeloupe	596	688	1.2	1,430	2.4
Guatemala	1,477	42,364	28.7	2,849	1.9
Haiti	1,200	10,207	8.5	3,032	2.5
Honduras	578	46,250	80.0	1,107	2.0
Jamaica	6,716	4,450	.7	7,614	1.1
Leeward Islands	1,227	715	.6	510	.4
Martinique	684	385	.6	2,300	3.4
Mexico	62,137	767,258	12.3	80,800	1.3
Netherland W. Indies	173	403	2.3	2,002	11.6
Newfoundland	800	42,734	53.4	3,027	3.8
Nicaragua	350	49,213	140.6	1,170	3.3
Panama and Canal Zone	679	32,388	47.7	8,018	11.8
Paraguay	3,686	176,000	47.7	1,800	.5
Peru	12,056	524,800	43.5	14,371	1.2
Puerto Rico (inc. 1206 mi. of former trails)	2,286	3,435	1.5	13,654	6.0
El Salvador	1,605	13,176	8.2	2,248	1.4
Trinidad and Tobago	1,258	1,976	1.6	6,450	5.1
Uruguay	22,477	72,172	3.2	47,430	2.1
Venezuela	2,211	393,976	178.2	18,000	8.1
United States	3,009,066	3,026,789	1.0	26,697,398	8.9
Windward Islands	853	516	.6	650	.8
<b>America, Total</b>	<b>3,796,191</b>	<b>15,714,421</b>	<b>4.1</b>	<b>28,815,053</b>	<b>7.5</b>
<b>EUROPE</b>					
Aegean Islands	626	759	1.2	649	1.0
Albania	1,566	17,374	11.1	450	.3
Austria	37,920	32,372	.9	39,600	1.0
Azores	600	922	1.5	647	1.1
Belgium	18,894	11,754	.6	158,986	8.4
Bulgaria	10,059	39,825	4.0	3,687	.4
Cyprus (excl. 147 mi. of trails)	2,920	3,584	4.1	1,558	1.8
Czechoslovakia	48,710	54,196	1.1	79,000	1.6
Danzig	1,115	830	.7	1,910	1.7
Denmark	32,062	16,574	.5	113,820	3.5

Continued on



# Highways in World

Figures as of January 1, 1931. Mileage of city streets are not included.)

Country	Road Mileage	Area Sq. Mi.	Area to 1 Mile of Road	Auto- mobiles	Automobiles to 1 Mile of Road
Estonia	14,650	18,376	1.3	3,095	.2
Finland	32,660	132,597	4.1	36,234	1.1
France	405,132	212,736	.5	1,459,650	3.6
Germany	216,671	180,989	.8	679,300	3.1
Gibraltar	15	2	.1	651	43.4
Greece	6,719	50,270	7.5	19,250	2.9
Hungary	37,099	35,911	1.0	19,333	.5
Iceland	1,336	39,709	30.0	1,550	1.2
Irish Free State	46,656	26,935	.6	48,400	1.0
Italy	105,637	119,744	1.1	291,587	2.8
Latvia	18,656	25,402	1.4	3,935	.2
Lithuania	27,683	21,490	.8	2,344	.8
Luxemburg	2,545	999	.4	8,891	3.5
Malta and Gozo	328	122	.4	2,313	7.0
Netherlands	15,534	13,213	.9	118,735	7.6
Northern Ireland	12,995	5,237	.4	27,035	2.1
Norway	23,343	125,017	5.3	46,473	2.0
Poland	141,039	149,957	1.1	41,260	.3
Portugal	11,807	35,796	3.0	30,557	2.6
Rumania	66,212	113,887	1.7	37,000	.6
Russia (incl. Asiatic Russia)	1,864,109	8,241,921	4.4	57,640	.03
Spain	54,144	195,040	3.7	178,250	3.3
Sweden	81,314	173,143	2.1	145,273	1.8
Switzerland	9,235	15,944	1.7	81,045	8.8
United Kingdom	177,256	89,041	.5	1,402,237	7.9
Yugoslavia	24,626	96,737	4.0	12,451	.5
<b>Europe, Total</b>	<b>3,551,873</b>	<b>10,298,405</b>	<b>2.9</b>	<b>5,154,796</b>	<b>1.5</b>
<b>AFRICA</b>					
Algeria	20,632	847,528	41.1	50,250	2.4
Anglo-Egyptian Sudan	14,232	1,008,000	70.8	2,845	.2
Angola	15,170	484,800	32.0	2,500	.16
Belgian Congo	9,511	920,849	96.8	5,943	.6
British South Africa (incl. Rhodesia)	8,250	437,950	53.1	12,630	1.5
British S. W. Africa		311,820		3,505	
British West Africa:					
Gambia and Protectorate	15	4,134	275.6	260	17.3
Gold Coast	6,643	80,000	12.0	7,358	1.1
Nigeria	14,000	372,674	26.6	8,078	.6
Sierra Leone and Protectorate	650	31,000	47.7	858	1.3
Canary Islands	650	3,021	4.6	11,400	17.5
Cyrenaica	1,487	75,340	50.7	(1)	
Egypt	3,965	386,000	97.4	30,136	7.6
Eritrea	2,033	45,754	22.5	494	.2
Ethiopia	2,615	347,490	132.9	673	.3
French Equatorial Africa	10,505	915,057	87.1	(1)	
French West Africa	14,912	1,854,714	124.4	11,660	.8
Kenya Colony	7,782	225,100	29.0	9,977	1.3
Liberia	234	46,332	198.0	272	1.2
Madagascar	4,138	227,734	55.0	3,324	.8

the following page



# 9,225,000 Miles of Highways in World

Country (Continued)	Road Mileage	Area Sq. Mi.	Area to 1 Mile of Road	Auto- mobiles	Automobiles to 1 Mile of Road
Madeira	537	314	.6	955	1.8
Mauritius	634	720	1.1	2,676	4.2
Morocco (French)	2,515	162,000	64.4	16,065	6.4
Morocco (Spanish and International Zone)	1,308	9,105	7.0	4,239	3.2
Mozambique (1100 mi. passable in dry weather only)	14,000	297,734	21.3	2,300	.16
Nyassaland	3,867	37,890	9.8	1,281	.3
Portuguese Guinea	1,740	36,125	20.8		
Reunion	637	970	1.5	1,109	1.7
Seychelles	47	156	3.3	45	1.0
Somaliland (British)	945	68,000	72.0	56	.06
Somaliland (French)	Not available	5,790		157	
Somaliland (Italian)	5,278	190,000	36.0	526	.01
South Africa (Union of)	111,236	471,917	4.2	149,400	1.3
Spanish Guinea	10	10,036	1,003.6		
Tanganyika	12,740	373,500	29.3	4,972	.4
Tripolitania	1,025	347,491	339.0		
Tunisia	7,161	48,300	6.7	11,500	1.6
Uganda	6,861	94,024	13.7	4,254	.6
Zanzibar and Pemba	236	1,020	4.3	250	1.1
<b>Africa, Total</b>	<b>308,201</b>	<b>10,780,389</b>	<b>35.0</b>	<b>361,948</b>	<b>1.2</b>
<b>ASIA</b>					
Afghanistan	1,561	250,965	160.7	350	.2
Arabia	1,055	1,000,000	947.8	1,653	1.6
British India (excl. Indian States)	225,280	1,107,968	4.9	174,450	.8
British Malaya	7,435	52,603	7.1	41,652	5.6
Ceylon	24,115	25,332	1.1	20,727	.9
China (incl. Manchuria and Mon- golia)	40,000	4,300,000	107.5	36,771	.9
Chosen (Korea)	12,831	85,227	6.6	4,722	.3
French Indo-China	20,418	284,900	14.0	22,239	1.1
Hong Kong	397	391	1.0	2,621	6.6
Iraq	4,565	143,250	31.4	4,095	.9
Japan (includes city streets)	655,399	147,327	.2	95,719	.1
Macao	18	44	2.4	Not available	
Netherland East Indies	36,200	733,642	20.3	84,783	2.3
Palestine	1,275	8,800	6.9	2,920	2.3
Persia	8,300	628,000	75.7	9,800	1.2
Philippine Islands	8,325	114,400	13.7	37,049	4.5
Siam	1,049	200,149	190.8	7,121	6.8
Syria	5,597	74,000	13.2	10,246	1.8
Taiwan (Formosa)	9,379	13,795	1.5	2,650	.3
Turkey	19,167	294,492	15.4	8,800	.5
<b>Asia, Total</b>	<b>1,082,346</b>	<b>9,465,285</b>	<b>8.7</b>	<b>567,818</b>	<b>.5</b>
<b>AUSTRALIA, NEW ZEALAND AND ISLANDS IN THE PACIFIC</b>					
Australia	416,236	2,974,581	7.1	563,657	1.4
British Pacific Islands	150	17,445	116.3	344	2.3
Fiji	477	10,068	21.1	1,214	2.5
French Oceania	240	1,250	5.2	514	2.1
Guam	123	210	1.7	408	3.3
Hawaii	1,717	6,449	3.8	47,864	27.8
New Zealand	49,120	105,862	2.1	189,615	3.9
Samoa (American)	30	76	2.5	68	2.0
Western Samoa	60	1,235	20.6	380	6.3
<b>Australia, New Zealand and Islands in the Pacific, Total</b>	<b>486,153</b>	<b>3,115,176</b>	<b>6.4</b>	<b>804,054</b>	<b>1.7</b>
<b>WORLD MILEAGE</b>					
America	3,796,191	15,714,421	4.1	28,815,053	7.6
Africa	308,201	10,780,389	35.0	361,948	1.2
Asia	1,082,366	9,465,285	8.7	567,818	.5
Europe	3,551,873	10,298,405	2.9	5,154,796	1.5
Australia, New Zealand, etc.	486,153	3,115,176	6.4	804,054	1.7
<b>World Total</b>	<b>9,224,784</b>	<b>49,373,696</b>	<b>5.4</b>	<b>35,703,669</b>	<b>3.9</b>



# 1931 Parts, Accessory and Tire Business

(Parts figures from Motor and Equipment Association)

(Tire figures from The Rubber Manufacturers Association, Inc.)

Original Equipment of parts, tires, etc.....		\$371,533,000
Parts, units and accessories.....	\$261,888,000	
Rubber tires and tubes.....	\$109,645,000	
Replacements of parts, tires, etc.....		\$732,768,000
Parts, units, accessories and service equipment.....	\$403,833,000	
Rubber tires, tubes and repair materials.....	\$328,935,000	
<b>Total Parts and Tire Business.....</b>		<b>\$1,104,301,000</b>

## Wholesale Value of Automobile Tire Shipments

(Figures represent estimates for entire industry based on actual reports from 92% of the industry, compiled by The Rubber Manufacturers Association, Inc.)

Year	Pneumatic Casings	Inner Tubes	Solids and Cushions	Auto Tire Sundries and Fabrics	Total
1926...	739,158,000	132,490,000	39,236,000	33,120,000	944,004,000
1927...	679,072,000	108,225,000	36,076,000	33,200,000	856,573,000
1928...	676,692,000	103,102,000	26,841,000	33,000,000	839,635,000
1929...	629,100,000	90,090,000	18,700,000	29,850,000	767,740,000
1930...	466,766,000	67,497,000	10,157,000	22,874,000	567,294,000
1931...	362,513,000	53,128,000	5,882,000	17,057,000	438,580,000

## Rubber Tire Shipments

(Figures from The Rubber Manufacturers Association, Inc.)

	Number of Units			
	1928	1929	1930	1931
High Pressure Casings.....	26,386,606	20,184,137	9,967,597	7,455,443
Balloon Casings.....	47,909,309	53,837,041	43,673,788	42,605,248
Solids and Cushions...	683,469	570,372	313,422	209,445
Inner Tubes.....	77,126,918	75,297,737	54,940,293	50,021,469

## Automobile Insurance in the U. S.

(Compiled by The Insurance Year Book Service, The Spectator Company)

	Year	Net Premiums	Losses Paid†	Ratio of Losses Paid to Premiums Written
Auto Liability.....	1931	214,127,034	153,311,197	71.6
	1930	211,489,945	174,628,437	82.6
Auto Collision.....	1931	17,862,956	12,246,219	68.6
	1930	17,791,868	12,437,522	69.9
Auto Property Damage.....	1931	82,035,428	44,676,498	54.5
	1930	82,328,124	48,091,244	58.4
*Fire and Theft.....	1931	118,004,348	70,146,994	59.4
	1930	136,994,230	73,951,844	54.0
<b>Totals.....</b>	<b>1931</b>	<b>432,029,766<sup>1</sup></b>	<b>280,380,908</b>	<b>64.9</b>
	<b>1930</b>	<b>448,604,167<sup>1</sup></b>	<b>309,109,047</b>	<b>68.9</b>

<sup>1</sup>Does not include "full coverage insurance on automobiles" by mutual companies and by reciprocal and Lloyds associations. In 1930 this amounted to \$75,880,042.

\*Fire insurance companies transact all branches of automobile insurance with the exception of liability. A great portion of this business, however, is fire and theft insurance.

†Includes investigation and adjustment of claims expense but does not include agents commissions, home office and operating expenses.

# 1931 Safety



# Honor Roll

## Fifty-four Cities Reduce Motor Fatalities\*

(Compiled by National Safety Council from Police Departments and Motor Vehicle Bureaus)

### OVER 500,000 POPULATION

	1930 Fatali- ties	1931 Fatali- ties	Percent Change		1930 Fatali- ties	1931 Fatali- ties	Percent Change
Buffalo, N. Y. ....	132	108	-18.2	New York City. . .	1,163	1,116	-4.0
Cleveland, Ohio. . .	250	249	-0.4	Philadelphia, Pa..	316	311	-1.6
Detroit, Mich. ....	344	330	-4.1	Pittsburgh, Pa. . .	186	178	-4.3
Hudson Co., N. J..	126	84	-33.3	San Francisco, Cal.	126	104	-17.5
Milwaukee, Wis. . .	90	86	-4.4				

### 250,000 TO 500,000 POPULATION

Akron, Ohio. ....	78	57	-26.9	Minneapolis, Minn.	94	87	-7.4
Cincinnati, Ohio. .	122	115	-5.8	Newark, N. J. ....	117	95	-18.8
Columbus, Ohio. . .	93	81	-12.9	New Orleans, La. .	94	88	-6.4
Dallas, Tex. ....	68	57	-16.2	Oakland, Calif. . .	114	99	-13.2
Houston, Tex. ....	66	54	-18.2	Providence, R. I. .	36	28	-22.2
Jersey City, N. J..	51	45	-11.8	Rochester, N. Y. . .	48	35	-27.1
Memphis, Tenn. . .	44	44	0.0				

### 100,000 TO 250,000 POPULATION

Chattanooga, Tenn.	26	24	-7.7	Reading, Pa. ....	16	16	0.0
Des Moines, Ia. ....	29	29	0.0	San Antonio, Tex..	32	24	-25.0
Duluth, Minn. ....	27	20	-25.9	San Diego, Cal. ....	62	53	-14.5
El Paso, Tex. ....	36	17	-52.8	Somerville, Mass. .	13	12	-7.7
Fall River, Mass. .	8	6	-25.0	Springfield, Mass..	29	18	-37.9
Grand Rapids, Mich. ....	29	14	-51.7	Tampa, Fla. ....	26	18	-30.8
Lowell, Mass. ....	17	17	0.0	Waterbury, Conn..	25	15	-40.0
Lynn, Mass. ....	14	10	-28.6	Wichita, Kan. ....	27	8	-70.4
New Haven, Conn.	24	19	-20.8	Worcester, Mass. .	33	23	-30.3
Omaha, Nebr. ....	47	44	-6.4	Youngstown, Ohio.	42	42	0.0

### UNDER 100,000 POPULATION

Atlantic City, N.J.	14	10	-28.6	Malden, Mass. ....	8	7	-12.5
Bayonne, N. J. ....	20	12	-40.0	Medford, Mass. ....	8	5	-37.5
Berkeley, Cal. ....	16	14	-12.5	Moline, Ill. ....	6	5	-16.7
Colo. Spgs., Colo. .	10	8	-20.0	Oshkosh, Wis. ....	2	1	-50.0
Great Falls, Mont.	1	1	0.0	Pawtucket, R. I. . .	9	6	-33.3
High. Park, Mich. .	12	7	-41.7	Pittsfield, Mass. . .	6	6	0.0
Hoboken, N. J. ....	14	8	-42.9	Portland, Me. ....	14	14	0.0
Holyoke, Mass. ....	11	6	-45.5	Pueblo, Colo. ....	10	5	-50.0
Kalamazoo, Mich. .	10	5	-50.0	Salem, Mass. ....	6	5	-16.7
Kokomo, Ind. ....	2	2	0.0	Topeka, Kan. ....	12	11	-8.3
Lawrence, Mass. . .	6	6	0.0	Union City, N. J. . .	10	3	-70.0

\*Collisions of automobiles with heavier vehicles and motorcycle accidents are included, but deaths from accidents occurring outside city are excluded.

# Motor Fatalities, 1920-1931

(Figures from National Safety Council)

Year	Number Automobile Fatalities†	Rate per 100,000 Population	Rate per 100,000 Registra- tions‡	Year	Number Automobile Fatalities†	Rate per 100,000 Popu- lation	Rate per 100,000 Registra- tions‡
1920...	11,061	10.4	116.2	1926...	20,945	18.0	94.0
1921...	12,355	11.4	115.1	1927...	23,126	19.6	98.9
1922...	13,660	12.4	109.3	1928...	24,937	20.8	100.7
1923...	16,432	14.7	107.1	1929...	28,282	23.3	105.6
1924...	17,566	15.5	98.5	1930...	30,228	24.5	112.8
1925...	19,610	17.1	97.1	1931...	*31,000	*25.0	*118.8

†Does not include railroad grade crossing fatalities or motorcycle deaths. ‡Includes motorcycle deaths.

\*Estimated by National Safety Council.

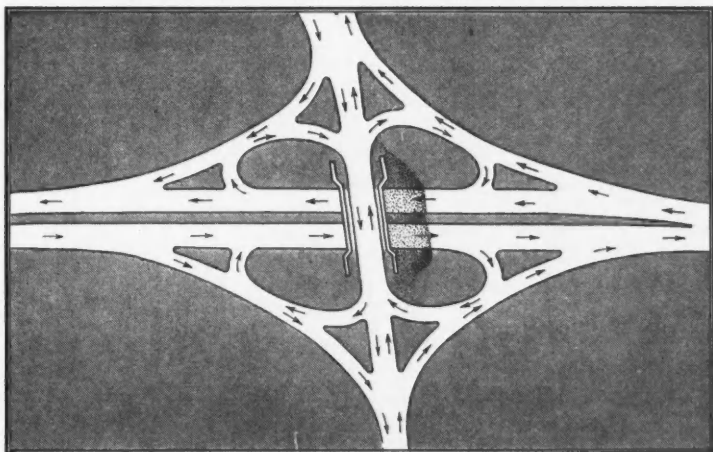
## 6.8% Reduction in Automobile Grade Crossing Fatalities 1931

(Figures from Interstate Commerce Commission)

Year	All Crossing Fatalities including Wagons, etc.	AUTOMOBILE CROSSING FATALITIES	Year	All Crossing Fatalities including Wagons, etc.	AUTOMOBILE CROSSING FATALITIES
1920.....	1,791	1,273	1928.....	2,568	2,165
1922.....	1,810	1,359	1929.....	2,485	2,085
1924.....	2,149	1,688	1930.....	2,020	1,695
1927.....	2,372	1,974	1931.....	1,811	1,580

## Traffic Ramps and Grade Separation on Mount Vernon Memorial Highway

(Diagram by courtesy of U. S. Bureau of Public Roads)



Arrows indicate distribution of traffic in all directions without left turns or cross traffic.

# Uniform Traffic Code and Ordinance Proposed

by National Conference on Street and Highway Safety

Under the auspices of the Third National Conference on Street and Highway Safety the Model Municipal Traffic Ordinance has been revised and printed. Copies of this Ordinance, which has been substantially adopted by a number of cities, are available free of charge from the National Conference offices, 1615 H Street, Washington, D. C.

A proposed Uniform Vehicle Code, in four parts, providing for certificate of title; motor vehicle registration; driver's license; and rules of the road, was approved by the same body in 1930. The Code has been substantially adopted in several states as shown below. Copies are available free of charge from the National Conference offices.

## States Having Modified Laws as a Result of Conference Code

As of October 1, 1931

	Adopted Uniform Vehicle Code or Substantial Portions Thereof			Changes Made In Laws Toward Conformity With Uniform Vehicle Code		Had Laws Providing For Certificate of Title Or Ownership And/Or Operators License With Mandatory Examination	
<b>UNIFORM REGISTRATION ACT*</b>	Ariz. 1927 Colo. 1931 Del. 1929 Idaho 1927 La. 1928	N. M. 1929 N. C. 1927 N. D. 1927 Pa. 1927 Va. 1926		Nev. 1931 Ore. 1929			
<b>UNIFORM CERTIFICATE OF TITLE &amp; ANTI-THEFT ACT</b>	Ariz. 1927 Del. 1929 D. C. 1932 Idaho 1927 Nev. 1929	N. M. 1929 N. D. 1927 Pa. 1927 Va. 1928		Ore. 1929		Cal. Colo. Fla. Ga. Ind. Md. Mich.	Mo. Mont. N. C. Okla. S. D. Utah W. Va. Wis.
<b>UNIFORM OPERATORS &amp; CHAUFFEURS LICENSE ACT</b>	Ariz. 1927 Colo. 1931 Del. 1929 Iowa 1931 Kan. 1931	Mich. 1931 Ore. 1931 Pa. 1927 W. Va. 1930	Ind. 1929 Nebr. 1929 Nev. 1931	S. C. 1930 Tenn. 1929 Wis. 1927		Cal. Conn. D. C. Md. Mass.	N. H. N. J. N. Y. R. I. Vt.
<b>UNIFORM ACT REGULATING OPERATION OF VEHICLES ON HIGHWAYS†</b>	Ariz. 1927 Calif. 1931 Colo. 1931 Del. 1929 Idaho 1927 La. 1928 Mich. 1927 Minn. 1927 Nebr. 1931	N. M. 1929 N. C. 1927 N. D. 1927 Ore. 1931 Pa. 1927 S. D. 1929 Utah 1931 Va. 1926 Wis. 1929	Maine 1929 N. H. 1927 N. J. 1928 Wash. 1927				
<b>MODEL ORDINANCE RULES INCLUDED IN STATE LAWS</b>	N. J. 1928 Wis. 1929		Conn. 1929 N. Y. 1929				

\*All States have some form of registration laws.

†All States have some form of rules of the road and equipment requirement laws.

# 29,836,412 Motorists at National Forests

## 92% of 1931 Visitors Travel by Automobiles

(Figures from United States Forest Service)

### NUMBER OF PERSONS BY MODES OF TRAVEL

States	Automobiles	Railroads, Trolleys, etc.	Hikers	All Other	Total
Alabama.....	20,000	.....	500	500	21,000
Alaska.....	19,500	2,500	28,000	23,300	73,300
Arizona.....	2,760,015	33,943	5,380	19,196	2,818,534
Arkansas.....	22,000	.....	600	1,650	24,250
California.....	16,074,194	1,235,275	109,187	36,092	17,454,748
Colorado.....	2,011,464	212,146	13,600	27,861	2,265,071
Florida.....	22,035	.....	.....	2,000	24,035
Idaho.....	429,689	2,335	3,822	10,083	445,929
Michigan.....	216,734	5,159	625	334	222,852
Minnesota.....	133,837	4,960	431	434	139,662
Montana.....	997,114	30,142	13,652	9,335	1,050,243
Nebraska.....	11,695	175	.....	50	11,920
Nevada.....	26,784	900	265	425	28,374
New Hampshire...	1,419,617	116,408	21,100	6,652	1,563,777
New Mexico.....	996,428	11,992	4,335	21,178	1,033,933
North Carolina...	284,150	500	5,200	2,000	291,850
Oklahoma.....	270,452	.....	300	1,500	272,252
Oregon.....	1,422,613	202,932	15,597	10,431	1,651,573
Pennsylvania.....	17,500	600	500	200	18,800
Puerto Rico.....	.....	.....	500	.....	500
South Dakota.....	212,791	8,500	950	725	222,966
Tennessee.....	35,925	1,650	1,925	5,850	45,350
Utah.....	629,143	10,310	8,401	23,687	671,541
Virginia.....	34,500	800	1,200	400	36,900
Washington.....	1,361,408	29,109	10,365	6,472	1,407,354
West Virginia.....	36,000	.....	.....	.....	36,000
Wisconsin.....	17,925	.....	.....	.....	17,925
Wyoming.....	352,899	14,901	2,535	7,639	377,974
<b>Total.....</b>	<b>29,836,412</b>	<b>1,925,237</b>	<b>248,970</b>	<b>217,994</b>	<b>32,228,613</b>

## 897,038 Cars Visit National Parks, 1931

(Figures from National Park Service)

Year	Total Visitors	Number of Cars	Year	Total Visitors	Number of Cars
1918.....	.....	53,966	1925.....	1,760,512	368,212
1919.....	.....	97,721	1926.....	1,930,865	406,248
1920.....	.....	128,074	1927.....	2,354,643	557,079
1921.....	.....	175,825	1928.....	2,522,188	595,236
1922.....	.....	197,105	1929.....	2,680,597	689,945
1923.....	1,280,886	271,482	1930.....	2,774,561	779,275
1924.....	1,422,353	315,916	1931.....	3,152,845	897,038



# Automobile Financing

(Figures from National Association of Finance Companies)

The following tabulation represents the composite experience of a large number of representative finance companies and is based upon individual averages for the first nine months of 1926 to 1929, and for 12 months of 1930 and 1931. Items marked (\*) are derived from reports made by many automobile dealers, representative of the whole country, obtained through the courtesy of the National Automobile Dealers Association.

PASSENGER CARS						
Average Direct Loss Per Repossessed Car:*	1926	1927	1928	1929	1930	1931
12 or less equal monthly payments.....	\$65	\$43	\$56	\$60	\$61	\$43
13 to 18 equal monthly payments.....	94	58	75	83	80	66
Balloon note or over 18 monthly payments...	158	**	**	112	100	**
Increase of Losses Over Standard Terms:						
13 to 18 equal monthly payments.....	44%	35%	34%	38%	31%	53%
Balloon note or over 18 monthly payments...	143%	**	**	87%	64%	**
Percentage of Repossessions:						
New cars with down payment of 33.3%.....	2.1%	2.7%	2.8%	2.8%	3.6%	4.4%
New cars with down payment of 25%.....	4.0%	5.9%	4.1%	5.1%	4.6%	5.8%
All new cars.....	4.3%	5.2%	5.3%	5.3%	6.5%	7.0%
Used cars with down payment of 40%.....	8.6%	6.9%	10.9%	9.0%	9.8%	14.6%
Used cars with down payment of 35% or less.	.....	.....	.....	.....	.....	11.4%
All used cars.....	.....	.....	.....	.....	.....	.....
Increase of Repossessions Over Standard Terms:						
New cars with down payment of 25%.....	92%	115%	46%	82%	28%	32%
Used cars with down payment of 35% or less.	101%	31%	93%	70%	51%	108%
Average Amount of Note Purchased:						
New cars, including some commercial.....	\$595	\$574	\$635	\$595	\$567	\$554
Used cars, including some commercial.....	277	286	307	296	279	268
(*) Percentage Sold on Installments:						
New cars.....	64.5%	58.0%	58.1%	62.6%	62.3%	62.8%
Used cars.....	65.2%	63.1%	60.8%	65.1%	64.8%	60.4%
All cars.....	64.8%	60.8%	59.5%	64.0%	63.8%	61.3%
(*) Percentage of Trade-Ins and Used Car Sales:						
Trade-ins on sales of new cars.....	.....	72.0%	69.4%	72.5%	75.1%	80.2%
Trade-ins on sales of used cars.....	.....	37.1%	39.4%	45.5%	49.1%	46.7%
Total trade-ins in % of new cars sold.....	90.0%	116.0%	115.5%	127.1%	155.5%	160.0%
Used cars sold in % of new cars sold.....	.....	118.5%	117.0%	128.6%	164.0%	170.6%
Used cars junked in % of total trade-ins.....	.....	6.9%	8.1%	9.2%	14.3%	13.5%
Skips Per 1,000 Transactions.....						
	.....	.....	4.7	5.2	5.1	5.5
Installment Paper Ratios:						
Paper with more than 12 monthly payments..	13.2%	12.4%	14.5%	14.9%	16.6%	17.8%
Paper with less than standard down payment.	9.0%	5.2%	6.1%	8.0%	11.8%	11.1%
New car paper to total paper purchased.....	67.0%	73.2%	71.6%	70.0%	63.4%	60.1%
Used car paper to total paper purchased.....	33.0%	26.8%	28.4%	30.0%	36.6%	39.9%
Number new cars to total financed.....	48.6%	57.6%	54.9%	54.0%	46.2%	42.1%
Number used cars to total financed.....	51.4%	42.4%	45.1%	46.0%	53.8%	57.9%
Used car paper per cent with recourse***.....	.....	65.8%	66.0%	66.3%	68.5%	61.8%
Cos. taking all used car paper with rec.....	46.0%	36.8%	37.6%	38.0%	38.3%	29.8%
Cos. taking part used car paper with rec.....	40.0%	55.6%	54.8%	56.2%	52.4%	54.4%
Cos. taking all or part used car paper with rec.	86.0%	92.4%	92.4%	94.1%	90.7%	84.2%
Used car paper above Red Book appr. value...	.....	.....	27.3%	29.3%	38.9%	39.2%

\*This means amount owing minus amount received from sale.

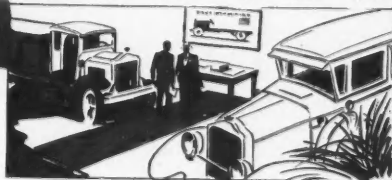
\*\*No cases reported, or too few to justify inclusion.

\*\*\*Including repurchase agreement.

# 48,060 Dealers in United States

(Figures from Chilton Class Journal Company, January 1, 1932)

STATES	Total Dealers	Passenger Car Dealers	Truck Dealers	Truck Dealers (Exclusive)	Car and Truck Dealers' Service Stations	Independent Repair Shops	Retail Accessory Outlets	Total Retail Outlets	Wholesalers (not included in preceding columns)
Alabama.....	432	405	258	13	346	539	596	910	50
Arizona.....	191	175	106	12	157	203	224	418	23
Arkansas.....	417	365	285	8	334	613	711	982	36
California.....	2,213	1,945	1,215	130	1,740	4,998	5,339	7,636	435
Colorado.....	571	532	319	13	515	697	691	1,274	61
Connecticut.....	652	571	275	27	565	684	1,039	1,389	90
Delaware.....	76	74	37	3	68	73	97	167	8
Dist. of Col.....	78	63	26	12	67	150	96	274	24
Florida.....	465	434	260	18	414	744	789	1,212	93
Georgia.....	549	530	404	16	500	697	812	1,274	61
Idaho.....	304	287	171	12	277	225	392	536	31
Illinois.....	2,930	2,606	1,346	80	2,487	3,288	3,762	6,257	288
Indiana.....	1,517	1,397	720	55	1,315	1,883	3,044	3,284	155
Iowa.....	1,845	1,747	1,120	31	1,533	1,567	2,121	3,421	119
Kansas.....	1,430	1,262	905	44	1,152	1,320	2,075	2,745	97
Kentucky.....	732	662	450	26	626	832	966	1,575	62
Louisiana.....	361	345	262	12	322	489	349	765	61
Maine.....	436	435	216	11	359	504	321	979	34
Maryland.....	545	504	239	24	455	471	666	1,061	59
Massachusetts.....	1,248	1,146	513	57	1,051	1,485	1,223	3,020	202
Michigan.....	2,037	1,868	1,153	53	1,652	2,129	2,650	4,313	180
Minnesota.....	1,780	1,684	1,142	38	1,514	1,653	2,895	3,503	94
Mississippi.....	460	436	327	10	399	390	706	923	30
Missouri.....	1,387	1,257	448	57	1,195	1,927	2,087	3,382	150
Montana.....	425	403	265	16	371	379	647	825	34
Nebraska.....	1,187	1,142	785	19	1,009	801	1,391	2,044	69
Nevada.....	116	111	75	1	102	61	157	191	4
New Hampshire.....	277	267	129	7	247	296	246	578	24
New Jersey.....	1,392	1,226	633	88	1,221	2,076	2,146	3,770	157
New Mexico.....	201	157	112	2	150	194	239	361	9
New York.....	3,749	3,341	1,806	228	3,051	5,360	3,997	9,857	544
North Carolina.....	640	600	423	21	595	937	1,095	1,600	71
North Dakota.....	706	664	473	23	576	449	932	1,196	18
Ohio.....	2,764	2,488	1,457	126	2,428	3,392	5,041	6,561	331
Oklahoma.....	778	739	553	22	735	984	574	1,872	76
Oregon.....	498	463	291	11	427	1,024	1,076	1,633	84
Pennsylvania.....	3,761	3,458	1,738	177	3,337	3,391	5,078	7,479	375
Rhode Island.....	243	217	105	16	187	300	359	650	36
South Carolina.....	345	307	229	5	299	488	537	841	39
South Dakota.....	656	524	373	24	496	585	673	1,160	24
Tennessee.....	565	488	335	37	417	813	733	1,395	66
Texas.....	1,982	1,725	1,171	54	1,592	3,436	2,865	5,211	210
Utah.....	216	198	111	11	184	301	337	564	29
Vermont.....	264	202	137	5	192	339	86	595	19
Virginia.....	802	742	475	37	716	1,120	1,283	1,980	64
Washington.....	817	738	416	40	668	1,609	1,702	2,460	131
West Virginia.....	650	604	358	28	560	765	1,167	1,507	67
Wisconsin.....	2,124	1,961	1,177	60	1,755	1,224	2,904	3,379	119
Wyoming.....	216	213	128	4	195	160	263	391	8
<b>Total, United States</b>	<b>48,060</b>	<b>43,708</b>	<b>25,952</b>	<b>1,824</b>	<b>40,548</b>	<b>58,045</b>	<b>69,179</b>	<b>109,400</b>	<b>5,051</b>
Canada.....	2,571	2,385	1,760	60	2,202	2,030	3,695	4,605	262



# \$9,610,000,000 Retail Automotive Sales in 1929

## 19.2% of All Retail Sales in United States

(Figures from U. S. Bureau of the Census, Census of Distribution, Calendar Year 1929)

	Number of Stores	Total Automotive Sales	% Auto. to All Retail Sales	Motor Vehicles New and Used	Tire and Accessory Stores	Garages and Parking Lots	Gasoline Filling Stations
Conn.....	3,464	\$145,897,769	19.0	\$98,010,936	\$11,264,260	\$9,665,127	\$26,387,419
Me.....	1,892	65,380,476	21.1	48,111,742	2,489,191	7,492,921	6,987,760
Mass.....	7,455	344,135,910	16.8	241,537,237	25,547,400	21,757,740	52,319,468
N. H.....	1,361	40,152,340	22.1	29,529,843	1,308,212	3,920,414	5,418,179
R. I.*.....	1,326	53,547,662	16.9	36,126,812	5,450,699	2,932,108	8,796,094
Vt.....	1,136	36,638,397	24.2	26,670,553	1,669,760	3,845,576	4,388,855
N. J.....	7,640	325,147,630	17.5	214,286,937	24,845,136	29,887,142	54,549,594
N. Y.*.....	19,985	965,835,510	13.3	656,204,235	69,566,636	89,177,186	142,791,049
Pa.....	16,469	629,958,317	15.6	424,203,319	49,138,676	52,548,584	102,570,853
Ill.....	13,986	620,733,197	16.8	412,375,286	46,275,991	49,950,884	110,482,634
Ind.....	7,996	274,300,320	22.4	180,338,448	21,877,401	20,124,210	51,214,796
Mich.....	10,565	56,672,636	22.7	344,007,997	30,374,950	21,369,965	109,068,913
Ohio.....	15,364	608,910,988	19.9	394,522,619	50,199,966	38,715,073	136,736,326
Wis.....	6,729	249,884,646	20.3	171,657,392	14,658,066	13,920,762	48,961,635
Ia.....	7,187	224,813,150	23.0	146,425,600	14,561,224	15,248,533	48,341,448
Kans.....	6,372	199,955,863	25.0	130,870,171	10,944,876	13,549,942	44,344,911
Minn.....	5,853	214,067,857	20.0	138,839,389	13,480,052	14,699,304	46,720,813
Mo.....	8,443	275,875,678	18.5	177,400,813	20,111,439	24,162,402	53,419,690
Neb.....	3,777	138,692,071	23.1	92,558,087	7,774,578	8,715,073	29,413,579
N. Dak.....	1,633	62,069,640	26.7	45,397,810	2,228,702	3,676,428	10,766,926
S. Dak.....	1,978	68,502,123	26.1	45,042,686	3,463,252	5,083,191	14,848,453
Del.....	611	20,695,675	20.0	13,522,835	1,432,885	1,466,307	4,254,238
D. of C.....	591	53,861,990	16.3	35,063,202	3,764,523	3,451,956	11,354,961
Fla.*.....	4,828	111,811,734	22.5	62,922,836	10,063,066	7,309,042	30,887,965
Ga.*.....	2,527	126,576,789	20.5	85,626,789	9,585,624	9,320,112	29,413,579
Md.*.....	2,357	97,480,591	15.8	64,551,075	8,274,737	6,419,888	17,903,535
N. C.*.....	5,867	136,980,596	18.4	83,587,946	7,917,069	8,703,480	36,521,940
S. C.*.....	2,616	62,318,885	20.8	42,246,383	2,683,253	3,335,973	13,907,940
Va.....	4,081	118,669,817	19.9	79,386,606	6,447,098	8,719,545	23,610,829
W. Va.*.....	2,644	83,768,711	18.9	52,876,203	4,787,760	5,993,662	19,117,182
Ala.....	3,243	103,838,078	19.8	70,514,133	6,757,936	7,823,845	18,424,322
Ky.....	3,298	107,721,569	18.2	75,807,589	5,968,994	9,024,510	16,548,762
Miss.....	2,862	89,856,854	21.7	64,455,230	2,687,543	5,548,708	17,115,878
Tenn.....	3,080	128,857,244	19.8	88,447,292	10,200,786	10,846,112	18,984,638
Ark.....	3,107	89,244,542	21.7	59,813,291	4,772,235	6,242,978	17,992,916
La.*.....	3,050	91,790,525	19.5	60,023,326	6,691,660	6,338,460	18,597,623
Okl.*.....	7,115	215,924,552	27.2	138,278,128	15,771,298	9,882,046	51,407,177
Tex.*.....	15,292	494,865,034	23.8	330,778,069	29,269,875	36,346,492	97,031,013
Ariz.....	1,202	49,490,233	25.8	34,021,508	2,976,383	4,162,218	8,185,356
Col.....	3,030	112,032,068	22.5	73,919,372	7,113,942	8,997,046	21,763,602
Idaho.....	1,094	43,336,160	25.6	30,608,193	2,846,739	3,553,026	6,268,330
Mont.....	1,367	61,155,472	25.4	42,795,700	2,875,350	5,193,889	10,110,063
Nev.....	288	12,884,644	25.6	9,513,144	517,784	1,489,506	1,350,934
N. Mex.....	920	28,968,612	24.2	19,695,984	1,630,317	2,777,223	4,812,807
Utah.....	1,069	46,502,196	23.2	32,377,068	2,132,294	3,135,164	8,654,398
Wyom.....	635	26,906,015	26.6	19,366,111	1,386,922	1,907,132	4,242,850
Cal.*.....	17,862	770,095,946	23.6	508,978,507	65,119,018	51,059,624	140,356,328
Ore.....	3,271	105,767,810	22.9	69,205,199	6,767,442	11,936,331	16,957,001
Wash.*.....	4,728	168,328,596	21.7	115,058,630	10,237,171	14,038,052	28,267,264
Total....	255,186	\$9,610,882,118	19.2	\$6,417,588,627	\$667,900,111	\$694,612,012	\$1,793,149,825

NOTE—Retail stores have been classified by the Census Bureau according to the group of commodities representing the greatest volume of sales. For this reason a considerable portion of the automotive sales consists of *other than* automotive products. Likewise other distribution channels such as department stores and general stores selling primarily other products, would include some automotive products.

—“Total automotive group” includes sales of boats, bicycles, motorcycles, aircraft (not shown in separate column) valued at \$36,490,489 for United States, preliminary figures subject to revision.

\*Preliminary figures subject to revision; all other states are final figures.

†Includes sales of repair parts and servicing labor, gas, oil, and accessories.

‡Includes sales of tires, accessories, candy, tobacco, groceries, lunch and other merchandise

—Includes battery, body, fender, radiator and paint shops.



# \$2,255,000,000 Sales by Wholesale Dealers in 1929

## Automotive Wholesalers Transact 3.2% of All Wholesale Business in United States

(Figures from U. S. Bureau of the Census, Calendar Year 1929)

State	Total Automotive Wholesale	% Auto- motive of All Wholesale	Motor Vehicles (000 omitted)	Automotive Equipment and Acces- sories (000 omitted)	Parts Tires and Tubes (000 omitted)	Sales at Retail†
Alabama.....	\$7,595,919	1.32	\$872	\$1,992	\$4,732	\$234,895
Arizona.....	4,185,552	4.29	(x)	1,763	79	707,675
Arkansas.....	4,455,623	1.19	(x)	2,983	1,345	2,766
California.....	160,056,577	3.85	85,329	32,253	42,475	18,291,796
Colorado.....	25,815,127	4.78	13,158	6,692	5,965	3,255,755
Connecticut.....	22,336,536	4.29	8,518	7,540	6,288	2,353,502
Delaware.....	1,032,327	0.87	(x)	708	.....	153,185
Dist. of Col.....	31,862,676	12.20	(x)	1,348	2,739	1,343,273
Florida.....	17,510,678	3.75	7,515	3,659	6,336	1,708,440
Georgia.....	33,452,616	3.29	12,261	6,210	14,982	1,384,084
Idaho.....	1,105,087	0.91	(x)	(x)	304	88,004
Illinois.....	187,564,347	2.73	104,105	41,973	41,486	16,590,429
Indiana.....	38,107,219	4.13	22,690	8,612	6,805	6,063,423
Iowa.....	42,527,661	4.02	23,295	12,036	7,196	5,658,259
Kansas.....	13,940,937	1.37	5,866	5,135	2,939	1,762,845
Kentucky.....	5,916,725	1.13	481	2,913	2,522	205,517
Louisiana.....	15,353,279	1.84	5,336	3,475	6,542	1,935,467
Maine.....	8,965,261	4.72	5,119	2,026	1,820	2,007,880
Maryland.....	14,069,743	1.90	4,049	4,998	5,023	2,093,347
Massachusetts.....	95,703,417	3.12	65,619	12,220	17,863	15,103,893
Michigan.....	212,150,635	9.77	(x)	69,878	61,960	18,690,693
Minnesota.....	47,102,667	2.74	(x)	9,377	11,177	5,850,198
Mississippi.....	2,535,518	0.66	(x)	1,192	(x)	43,976
Missouri.....	119,829,418	31.11	73,187	17,444	29,198	6,640,482
Montana.....	3,926,861	2.48	2,313	1,417	(x)	420,533
Nebraska.....	38,589,127	3.66	27,134	5,100	6,354	5,859,346
Nevada.....	619,068	4.51	(x)	469	(x)	30,759
New Hampshire.....	814,431	1.33	(x)	242	(x)	244,676
New Jersey.....	47,383,127	4.70	27,117	8,422	11,843	9,932,765
New Mexico.....	973,877	1.82	799	(x)	.....	267,454
New York.....	370,592,300	2.11	233,924	57,901	78,767	34,580,016
North Carolina.....	18,719,844	2.61	7,796	3,318	7,604	1,782,040
North Dakota.....	22,044,249	8.40	16,932	3,289	1,823	464,609
Ohio.....	142,001,164	4.59	82,498	21,667	37,835	19,158,910
Oklahoma.....	25,887,330	3.35	11,835	5,385	8,666	453,696
Oregon.....	16,825,298	3.60	6,410	(x)	4,477	1,245,601
Pennsylvania.....	230,568,883	4.83	129,946	65,592	35,030	29,919,209
Rhode Island.....	7,013,679	2.34	2,794	1,311	2,909	1,102,063
South Carolina.....	1,986,412	0.60	(x)	497	527	22,654
South Dakota.....	5,465,320	2.31	2,275	(x)	(x)	800,342
Tennessee.....	27,980,985	2.62	12,163	(x)	9,295	2,161,276
Texas.....	71,711,618	2.56	23,832	19,834	28,044	3,495,106
Utah.....	13,914,224	7.73	10,050	726	3,137	716,270
Vermont.....	2,120,331	3.69	1,769	222	129	730,582
Virginia.....	12,426,044	1.89	1,514	6,126	3,711	679,962
Washington.....	27,389,090	2.39	13,092	7,215	7,081	5,149,437
West Virginia.....	9,429,258	2.72	6,846	(x)	1,243	2,347,323
Wisconsin.....	42,673,772	4.36	29,581	6,768	6,325	4,948,286
Wyoming.....	1,292,979	3.73	(x)	930	102	9,997
<b>Total.....</b>	<b>\$2,255,524,716</b>	<b>3.26</b>	<b>\$1,226,345</b>	<b>\$489,797</b>	<b>\$534,678</b>	<b>\$238,692,686</b>

(x)—Values omitted because of disclosure of individual company figures. Totals for United States therefore are larger than the sum of the state figures shown.

\*Includes sales of other automotive products than those listed in separate columns, but does not include extreme right-hand column showing sales to consumers at retail.

†Retail sales made by wholesale establishments. These figures should be added to the retail sales by retail establishments given on page eighty-two.

# Income for State Highways

77% of Current State Highway Income  
from Special Motor Taxes

(Compiled from reports of State authorities)

State	1930 Fiscal Year Ends 1/	Total Fund Available for Use on State Highways	Balance at Beginning of Fiscal Year	Tot. Income for State Highways During Fiscal Yr.	State Tax Levied for State Highways 2/	Appropri- ation by State for Hghwys. 2/
Alabama	9/30	\$17,655,448	\$3,360,354	\$14,295,094		
Arizona	6/30	5,330,528	456,871	4,873,657	\$700,891	\$7,500
Arkansas	2/28/32	48,364,835	1,147,010	47,217,825		
California	6/30	49,743,967	13,646,446	36,097,521		4,596,538
Colorado	12/31	10,086,126	2,177,211	7,908,915	\$471,017	
Connecticut	12/31	15,890,356	1,106,969	14,783,387		
Delaware	12/31	8,709,729	6,258	8,703,471		\$5,578,875
Florida	12/31	10,932,163	956,944	9,975,219		
Georgia	6/30	14,338,365	718,606	13,619,759		
Idaho	12/31	6,780,106	459,442	6,320,664	324,638	
Illinois	12/31	70,108,363	6,664,237	63,444,126		167,425
Indiana	9/30	24,055,347	705,719	23,349,628		
Iowa	11/30	56,076,920	7,281,394	48,795,526		
Kansas	12/31	19,364,154	1,536,732	17,827,422		
Kentucky	3/31/32	28,788,233	2,737,409	26,050,824	320,122	
Louisiana	12/31	33,519,309	7,573,311	25,945,998		428,841
Maine	12/31	17,710,698	1,020,796	16,689,902	1,043,686	
Maryland	9/30	20,148,498	4,044,973	16,103,525		\$2,722,868
Massachusetts	11/30	29,214,185	5,345,535	23,868,650	1,150,067	
Michigan	6/30	51,448,230	2,851,487	48,596,743		
Minnesota	12/31	46,669,721	11,667,240	35,002,481	1,960,000	
Mississippi	1/31/32	5,297,569	789,707	4,507,862		
Missouri	12/31	48,922,452	5,826,463	43,095,989		
Montana	6/30	6,014,935	158,081	5,856,854		
Nebraska	12/31	11,468,746	870,012	10,598,734		107,500
Nevada	11/30	2,529,077	100,577	2,428,500		106,202
New Hampshire	12/31	10,994,874	2,109,284	8,885,590		
New Jersey	12/31	67,743,574	9,269,486	58,474,088	14,380,365	\$7,612,172
New Mexico	12/31	9,642,986	1,024,970	8,618,016	197,006	
New York	12/31	145,158,130	75,664,180	69,493,950		\$6,708,405
North Carolina	6/30	29,347,359	8,561,050	20,786,309		
North Dakota	12/31	4,195,157	358,532	3,836,625		
Ohio	12/31	49,764,419	8,975,924	40,788,495		
Oklahoma	12/31	21,000,579	2,283,452	18,717,127	208,767	
Oregon	12/31	17,024,785	1,267,199	15,757,586		
Pennsylvania	12/31	103,895,470	29,117,410	74,778,060		
Rhode Island	6/30	4,493,306	1,572,908	2,920,398		\$322,000
South Carolina	12/31	38,661,958	7,032,697	31,629,261		
South Dakota	12/31	9,077,602	3,325,422	5,752,180	73,198	
Tennessee	6/30	78,958,955	23,744,837	55,214,118		\$656,373
Texas	8/31	52,298,676	10,148,823	42,149,853		
Utah	12/31	5,262,701	424,526	4,838,175		
Vermont	6/30	8,810,921	1,076,575	7,734,346	151,755	\$669,831
Virginia	6/30	21,861,510	3,757,332	18,104,178		\$2,550,470
Washington	3/31/32	15,805,733		15,805,733		
West Virginia	12/31	32,125,640	5,918,226	26,207,414		
Wisconsin	6/30	33,918,507	7,177,443	26,741,064		7,500
Wyoming	12/31	3,953,010	470,415	3,482,595	93,979	
<b>Total</b>		<b>1,423,163,912</b>	<b>286,490,475</b>	<b>1,136,673,437</b>	<b>11,181,693</b>	<b>32,136,298</b>

1.—Fiscal years end in 1930, except those dated January, February or March, which end in 1931. 2.—State tax assessments and appropriations from state general fund are often made to cover bond obligations, and in such cases are noted if so reported. 3.—Includes \$353,845 from convict department and \$105,123 from bridge tolls. 4.—From state general fund to cover state highway bond payments. 5.—Includes receipts from freight and bus lines, \$50,062 transportation license tax, and \$471,832 franchise tax on gross receipts. 6.—Tax levy to cover payments on the 1921 issue of state highway bonds. 7.—Includes \$75,000 from internal improvement fund from public lands. 8.—From state general fund for retirement of state highway bonds. 9.—Includes taxes of former years held by court as follows:—1927, \$6,310,565, and 1929, \$11,659,778. 10.—Includes loan by counties of their share of gasoline tax amounting to \$1,600,000. 11.—

# By Sources in 1930

98.8% of State Road and Bridge Bonds in 1930  
Were Based on Motor Taxes

(by the U. S. Bureau of Public Roads)

Motor Vehicle Fees, Etc., Allotted to State Highways	Gas. Tax, Rec'pts, Etc., Allotted to State Highways	Miscel. Income for State Highways	State Bonds and Notes Issued for State Highways	Fed'l Aid Post Roads Fund Allotments Used	Fund Trans. from Local Authorities for State Highways	State
\$2,850,836	\$3,506,614	\$529,682	\$5,251,112	\$1,616,673	\$540,177	Alabama
778,438	1,662,739	65,747	.....	1,658,342	.....	Arizona
2,606,750	6,729,146	45,453	35,579,816	2,248,160	8,500	Arkansas
4,195,435	22,433,045	521,894	.....	3,931,823	418,786	California
833,998	4,171,888	775,003	.....	2,298,636	58,373	Colorado
8,429,344	4,481,948	83,971	.....	489,283	1,298,841	Connecticut
1,610,886	1,033,483	99,142	.....	381,085	.....	Delaware
3,376,477	4,527,699	.....	.....	1,230,205	840,838	Florida
4,189,434	8,066,000	15,804	.....	573,058	775,463	Georgia
193,034	2,959,374	36,840	1,000,000	1,015,341	791,437	Idaho
18,353,865	40,485,877	347,067	.....	4,089,892	.....	Illinois
6,019,183	14,193,672	374,505	.....	2,072,531	689,737	Indiana
11,902,456	5,964,502	103	126,788,608	3,875,822	264,035	Iowa
5,965,218	9,046,821	18,361	.....	2,372,874	424,148	Kansas
4,148,235	8,483,139	1648,935	18,448,770	2,570,518	1,431,105	Kentucky
4,632,156	7,334,713	43,896	11,260,599	183,439	2,062,354	Louisiana
3,102,595	4,611,716	141,338,823	3,335,299	1,216,103	2,041,680	Maine
12,458,200	15,866,622	293,681	2,377,193	757,060	1,627,901	Maryland
7,185,457	10,504,737	124,553	.....	1,264,132	3,639,704	Massachusetts
22,040,920	21,824,877	141,540,580	.....	2,302,905	887,461	Michigan
11,007,915	9,173,405	33,928	9,177,140	3,650,093	.....	Minnesota
72,138	2,816,710	17646,967	.....	461,923	510,124	Mississippi
10,049,280	8,788,507	723,131	20,053,239	3,481,832	.....	Missouri
.....	2,976,096	28,155	.....	2,628,090	224,513	Montana
1,274,885	7,020,692	.....	.....	2,093,045	102,612	Nebraska
366,036	674,711	28,185	.....	1,120,687	132,679	Nevada
2,056,500	2,469,765	382,632	1,500,000	895,071	1,581,622	New Hampshire
14,097,269	10,910,435	3,237	20,000,918	700,725	768,967	New Jersey
540,949	2,736,649	29,107	3,437,505	1,564,224	112,576	New Mexico
28,260,942	21,357,481	87,855	.....	3,617,748	9,461,519	New York
7,025,945	12,895,051	115,434	.....	711,611	38,268	North Carolina
978,257	1,260,000	207,613	.....	1,208,037	182,718	North Dakota
6,744,957	23,064,393	191,000,000	.....	4,499,882	5,479,263	Ohio
2,917,131	8,752,068	38,575	.....	4,463,272	2,337,324	Oklahoma
6,227,989	6,102,187	49,866	1,531,427	1,565,288	280,829	Oregon
33,828,215	28,819,600	191,140,682	.....	5,724,968	5,264,595	Pennsylvania
1,698,305	701,418	62,384	.....	136,291	.....	Rhode Island
2,686,938	6,483,933	1,364,807	20,474,910	471,252	147,421	South Carolina
1,557,314	2,809,751	93,784	.....	1,218,133	.....	South Dakota
4,537,710	10,016,283	1,316,776	36,630,772	1,459,547	596,657	Tennessee
4,625,479	21,180,893	374,371	.....	5,931,473	10,037,637	Texas
395,353	2,438,500	333,352	.....	921,154	749,816	Utah
2,439,656	1,874,827	191,379,053	441,000	333,467	444,757	Vermont
6,090,733	7,724,444	633,823	.....	1,090,623	14,085	Virginia
7,999,668	6,456,109	.....	.....	1,254,202	95,754	Washington
4,729,625	5,440,689	.....	15,000,000	1,037,100	.....	West Virginia
12,037,454	7,191,089	300,904	.....	3,058,505	4,145,612	Wisconsin
682,178	1,085,158	1505,160	.....	1,016,711	99,409	Wyoming
289,801,738	411,109,446	17,083,821	222,288,308	92,462,836	60,609,297	Total

Issued by counties for state primary roads. <sup>12</sup>—Includes \$561,978 receipts from state bridge tolls. <sup>13</sup>—Proceeds from sale of toll bridge bonds. <sup>14</sup>—Includes \$806,170 rental for equipment, \$260,673 bridge toll receipts, and \$271,980, subscriptions. <sup>15</sup>—Excludes 20 per cent of total receipts assigned to Baltimore streets. <sup>16</sup>—Includes fees for motor bus privilege. <sup>17</sup>—Includes \$345,267 flood relief funds from U. S. Government. <sup>18</sup>—Includes \$2,360,073 surplus from road tax sinking fund. <sup>19</sup>—Loan made in connection with drought relief program. <sup>20</sup>—Includes \$942,464 interest on deposits. <sup>21</sup>—Includes \$517,812 for interest on state bridge bonds. <sup>22</sup>—Includes \$836,095 from U. S. Government for flood repair work. <sup>23</sup>—Includes \$1,000,000 from state general fund to retire state highway certificates of indebtedness. <sup>24</sup>—Includes \$466,612 oil royalties paid by U. S. Government.

# Income for Local Roads

(Compiled from records of Local Authorities)

State	Total Funds Available	Balance From Previous Year	Total Income During Year	Local Road Tax Levy	Appropriation From General Fund
Alabama.....	\$13,026,158	\$1,305,056	\$11,721,102	\$3,882,459	\$1,753,824
Arizona.....	2,806,060	142,08	2,662,978	815,885	103,937
Arkansas.....	9,900,000	347,000	9,553,000	2,100,000	.....
California.....	49,181,395	15,060,508	34,120,887	12,989,320	4,732,371
Colorado.....	6,316,451	434,547	5,881,904	2,779,967	221,637
Connecticut.....	3,897,373	85,466	3,811,907	.....	3,811,907
Delaware.....	2,048,226	272,393	1,775,833	351,872	767,043
Florida.....	32,655,697	12,418,791	20,236,906	8,596,804	258,312
Georgia.....	14,886,049	1,738,931	13,147,118	9,430,793	204,095
Idaho.....	9,459,114	2,392,312	7,066,802	3,536,321	136,089
Illinois.....	40,128,712	.....	40,128,712	19,600,000	.....
Indiana.....	47,518,668	10,256,208	37,262,460	23,400,000	1,500,000
Iowa.....	28,884,038	2,615,289	26,268,749	15,861,820	2,880,000
Kansas.....	22,894,600	3,500,000	19,394,600	12,430,600	620,000
Kentucky.....	8,813,224	.....	8,813,224	6,000,000	.....
Louisiana.....	12,950,000	3,038,000	9,912,000	7,400,000	1,850,000
Maine.....	3,170,000	—33,836	3,203,836	800,000	2,263,836
Maryland.....	6,020,764	—43,552	6,064,316	3,219,619	602,968
Massachusetts.....	14,550,088	167,000	14,383,088	.....	10,234,000
Michigan.....	58,285,670	12,069,976	46,215,694	25,500,000	.....
Minnesota.....	27,003,938	1,200,918	25,803,020	16,875,613	970,000
Mississippi.....	36,025,345	12,569,032	23,456,313	12,172,378	1,720,576
Missouri.....	20,120,000	1,300,000	18,820,000	9,200,000	400,000
Montana.....	5,022,000	325,000	4,697,000	2,500,000	320,000
Nebraska.....	12,920,075	1,360,000	11,560,075	5,950,000	340,000
Nevada.....	1,224,082	471,062	753,020	599,903	33,559
New Hampshire.....	3,673,865	.....	3,673,865	.....	3,581,622
New Jersey.....	28,584,112	393,857	28,190,255	12,148,149	5,679,014
New Mexico.....	500,903	68,745	432,158	230,603	.....
New York.....	55,497,336	4,595,737	50,901,599	33,567,038	.....
North Carolina.....	9,780,044	2,705,567	7,074,477	5,737,798	124,597
North Dakota.....	5,549,175	1,844,768	3,704,407	2,076,534	200,000
Ohio.....	87,701,115	9,718,231	77,982,884	28,897,458	12,260,000
Oklahoma.....	18,000,000	1,862,000	16,138,000	6,795,000	1,215,000
Oregon.....	10,390,000	915,000	9,475,000	4,500,000	800,000
Pennsylvania.....	89,308,004	18,409,175	70,898,829	25,491,156	22,079,380
Rhode Island.....	1,224,664	15,034	1,209,630	.....	1,093,646
South Carolina.....	13,261,712	3,992,754	9,268,958	2,774,459	712,896
South Dakota.....	6,894,593	.....	6,894,593	3,547,912	1,659,899
Tennessee.....	22,355,516	6,587,712	15,767,804	6,477,002	1,333,607
Texas.....	43,000,000	10,862,000	32,138,000	18,700,000	350,000
Utah.....	2,296,608	355,607	1,941,001	1,386,061	217,575
Vermont.....	1,000,000	.....	1,000,000	500,000	200,000
Virginia.....	9,589,874	1,519,490	8,070,384	4,383,128	54,376
Washington.....	12,526,000	1,480,000	11,046,000	6,000,000	800,000
West Virginia.....	14,218,054	3,038,140	11,179,914	10,102,920	.....
Wisconsin.....	47,528,556	4,065,255	43,473,301	19,007,931	7,490,772
Wyoming.....	1,206,051	2,146	1,203,905	121,485	618,799
<b>Total.....</b>	<b>973,792,999</b>	<b>155,413,401</b>	<b>818,379,508</b>	<b>398,437,988</b>	<b>96,195,337</b>

# By Sources in 1930

(by the U. S. Bureau of Public Roads)

Motor Vehicle Licenses	Gasoline Tax Receipts	Miscel- laneous Income	Local Bond Sale Receipts	Transfer Funds From State for Local Roads	State
\$72,819	\$3,374,131	\$554,256	\$2,083,613	.....	Alabama
44,505	1,033,835	181,491	390,093	\$93,232	Arizona
1,026,750	6,367,650	58,600	.....	.....	Arkansas
3,553,178	10,450,670	1,120,800	880,586	393,962	California
626,503	1,586,997	328,475	22,938	315,387	Colorado
.....	.....	46,788	.....	610,130	Connecticut
1,214,595	7,011,313	2,624,491	531,391	.....	Delaware
.....	2,144,992	1,367,238	.....	.....	Florida
1,667,778	.....	342,261	1,043,631	340,722	Georgia
.....	17,303,772	100,000	1,350,000	1,774,940	Idaho
.....	4,250,000	2,460	8,110,000	.....	Illinois
208, 18	4,059,140	2,047,859	312,800	898,912	Indiana
1,750,000	1,750,000	1,205,000	1,639,000	.....	Iowa
563,224	.....	250,000	2,000,000	.....	Kansas
.....	.....	162,000	500,000	.....	Kentucky
.....	.....	100,000	40,000	.....	Louisiana
.....	.....	169,729	2,072,000	.....	Maine
.....	.....	413,000	400,300	3,335,788	Maryland
6,000,000	4,623,880	1,450,000	7,100,000	1,541,814	Massachusetts
.....	3,453,037	1,590,000	1,045,000	1,869,370	Michigan
2,857,021	4,075,623	933,856	1,696,859	.....	Minnesota
.....	.....	1,520,000	7,700,000	.....	Mississippi
1,527,000	.....	200,000	100,000	50,000	Missouri
2,581,845	2,263,230	400,000	25,000	.....	Montana
16,073	.....	10,128	75,000	18,357	Nebraska
5,949,827	.....	3,351	.....	88,892	Nevada
.....	.....	140,358	3,796,500	476,407	New Hampshire
201,555	.....	.....	.....	.....	New Jersey
6,088,134	5,695,328	.....	.....	5,551,099	New Mexico
782,873	645,000	480,834	448,083	283,165	New York
1,794,196	5,718,649	311,561	29,001,020	.....	North Carolina
3,921,815	2,887,185	519,000	800,000	.....	North Dakota
1,010,000	.....	700,000	1,250,000	1,215,000	Ohio
.....	4,644,213	5,748,096	5,419,194	7,516,790	Oklahoma
.....	.....	10,984	105,000	.....	Oregon
1,404,782	1,413,913	4,095,910	271,780	.....	Pennsylvania
254,431	1,962,991	2,494,520	282,000	.....	Rhode Island
8,964,000	.....	124,000	4,000,000	.....	South Carolina
.....	.....	143,965	193,400	300,000	South Dakota
.....	3,031,613	389,267	212,000	.....	Tennessee
830,000	2,416,000	500,000	100,000	400,000	Texas
.....	.....	4,994	1,072,000	.....	Utah
.....	4,647,465	406,33	5,370,040	6,550,761	Vermont
.....	300,082	86,472	.....	77,067	Virginia
54,911,122	107,110,709	33,338,076	94,684,481	33,701,795	Washington
.....	.....	.....	.....	.....	West Virginia
.....	.....	.....	.....	.....	Wisconsin
.....	.....	.....	.....	.....	Wyoming
.....	.....	.....	.....	.....	..... Total

# Organization of National Automobile Chamber of Commerce

*A list of Directors and Officers is given on page two*

## ADVERTISING COMMITTEE

JOHN M. HOWARD	General Motors Truck Company
CLIFF KNOBLE	Chrysler Sales Corporation
W. W. LEWIS	General Motors Corporation
F. H. MCKINNEY	Packard Motor Car Company
F. W. MUNRO	Hupp Motor Car Corporation
STEPHEN D. BRYCE, Jr.,	<i>Secretary</i>

## EXPORT COMMITTEE

ROBERT C. GRAHAM, <i>Chairman</i>	Graham-Paige Motors Corporation
R. J. ARCHER	Willys Export Corporation
R. L. BOUGHTON	The White Motor Company
B. C. BUDD	Packard Motors Export Corporation
RUFUS S. COLE	Hupp Motor Car Corporation
A. L. FRANK	The Studebaker-Pierce Arrow Export Corporation
ALLEN C. GERMANN	Hudson Motor Car Company
R. G. HUDSON	Reo Motor Car Company
W. LEDYARD MITCHELL	Chrysler Export Corporation
J. D. MOONEY	General Motors Export Company
GEORGE F. BAUER,	<i>Secretary</i>

## HIGHWAYS COMMITTEE

ROY D. CHAPIN, <i>Chairman</i>	Hudson Motor Car Company
A. J. BROSSAU	Mack Bros. Motor Car Company
GEORGE M. GRAHAM	Rockne Motors Corporation
ROBERT C. GRAHAM	Graham-Paige Motors Corporation
WILLIAM E. METZGER	Federal Motor Truck Company
PYKE JOHNSON,	<i>Secretary</i>

## INSURANCE COMMITTEE

WILLIAM E. METZGER, <i>Chairman</i>	Federal Motor Truck Company
A. C. ANDERSON	General Motors Corporation
A. BARIT	Hudson Motor Car Company
D. E. BATES	Reo Motor Car Company
R. P. FOHEY	Chrysler Corporation
A. G. RUMPF	The Studebaker Corporation
OTTO SANZENBACHER	The Willys-Overland Company
MILTON TIBBETTS	Packard Motor Car Company
J. S. MARVIN,	<i>Secretary</i>

## LEGISLATIVE COMMITTEE

L. A. MILLER, <i>Chairman</i>	The Willys-Overland Company
W. H. BREARLEY	The Autocar Company
E. L. CORD	Auburn Automobile Company
A. C. DOWNEY	Chrysler Corporation
D. C. FENNER	Mack Bros. Motor Car Company
RICHARD S. ARMSTRONG,	<i>Secretary</i>

## MOTOR FUEL COMMITTEE

WALTER P. CHRYSLER, <i>Chairman</i>	Chrysler Corporation
C. F. KETTERING	General Motors Corporation
CHARLES W. NASH	The Nash Motors Company

*(Continued on following page)*

# Organization of National Automobile Chamber of Commerce

(Continued from preceding page)

## MOTOR TRUCK COMMITTEE

A. J. BROUSSEAU, <i>Chairman</i>	Mack Bros. Motor Car Company
J. D. BURKE	Dodge Brothers Corporation
J. M. CLEARY	S. P. A. Truck Corporation
T. R. DAHL	The White Motor Company
D. C. FENNER	Mack Bros. Motor Car Company
W. F. MCAFEE	International Harvester Company
ROBERT P. PAGE, JR.	The Autocar Company
MARTIN L. PULCHER	Federal Motor Truck Company
PAUL W. SEILER	General Motors Truck Company
EDWARD F. LOOMIS, <i>Secretary</i>	

## ELECTRIC TRUCK COMMITTEE

G. A. FREEMAN, <i>Chairman</i>	Walker Vehicle Company
J. C. BOYERS	Ward Motor Vehicle Company

## PATENTS COMMITTEE

F. J. HAYNES, <i>Chairman</i>	Detroit, Michigan
J. KING HARNESS	Chrysler Corporation
CHARLES D. HASTINGS	Hupp Motor Car Corporation
JAMES McEVoy	General Motors Corporation
H. S. VANCE	The Studebaker Corporation
GEORGE C. ARVEDSON, <i>Department Manager</i>	

## SALES MANAGERS COMMITTEE

R. H. GRANT, <i>Chairman</i>	General Motors Corporation
C. G. ABBOTT	Hudson Motor Car Company
C. H. BLISS	The Nash Motors Company
JOS. E. FIELDS	Chrysler Sales Corporation
H. B. HARPER	The Willys-Overland Company
PAUL G. HOFFMAN	The Studebaker Corporation
H. W. PETERS	Packard Motor Car Company

## SHOW COMMITTEE

CHARLES D. HASTINGS, <i>Chairman</i>	Hupp Motor Car Corporation
A. R. ERSKINE	The Studebaker Corporation
ALFRED H. SWAYNE	General Motors Corporation
ALFRED REEVES, <i>Manager</i>	

## STREET TRAFFIC COMMITTEE

E. L. CORD, <i>Chairman</i>	Auburn Automobile Company
PAUL G. HOFFMAN	The Studebaker Corporation
ROBERT P. PAGE, JR.	The Autocar Company
E. R. STETTINIUS	General Motors Corporation
NORMAN DAMON, <i>Secretary</i>	

## TAXATION COMMITTEE

ROY D. CHAPIN, <i>Chairman</i>	Hudson Motor Car Company
WALTER P. CHRYSLER	Chrysler Corporation
A. R. ERSKINE	The Studebaker Corporation
GEORGE M. GRAHAM	Rockne Motors Corporation
ALVAN MACAULEY	Packard Motor Car Company
CHARLES W. NASH	The Nash Motors Company
R. P. PAGE, JR.	The Autocar Company
ALFRED P. SLOAN, JR.	General Motors Corporation
PYKE JOHNSON, <i>Secretary</i>	

(Continued on following page)

# Organization of National Automobile Chamber of Commerce

(Continued from preceding page)

## TRADE PROMOTION COMMITTEE

ALFRED P. SLOAN, JR., <i>Chairman</i> .....	General Motors Corporation
ROY D. CHAPIN.....	Hudson Motor Car Company
WALTER P. CHRYSLER.....	Chrysler Corporation
A. R. ERSKINE.....	The Studebaker Corporation
ALVAN MACAULEY.....	Packard Motor Car Company
CHARLES W. NASH.....	The Nash Motors Company

## TRAFFIC COMMITTEE

ALFRED H. SWAYNE, <i>Chairman</i> .....	General Motors Corporation
WALTER P. CHRYSLER.....	Chrysler Corporation
WILLIAM E. METZGER.....	Federal Motor Truck Company
J. S. MARVIN, <i>Department Manager</i>	

## TRUCK STANDARDS COMMITTEE

D. C. FENNER, <i>Chairman</i> .....	Mack Bros. Motor Car Company
B. B. BACHMAN.....	The Autocar Company
GEORGE A. GREEN.....	General Motors Truck Company
A. W. SCARRATT.....	International Harvester Company
E. M. STERNBERG.....	Sterling Motor Truck Company

## REPRESENTATIVES IN CHAMBER OF COMMERCE OF U. S. A.

A. J. BROSEAU.....	Mack Bros. Motor Car Company
ALFRED H. SWAYNE.....	General Motors Corporation

## REPRESENTATIVE ON HIGHWAY EDUCATION BOARD

ROY D. CHAPIN.....	Hudson Motor Car Company
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## REPRESENTATIVES IN INTERNATIONAL CHAMBER OF COMMERCE

A. J. BROSEAU.....	Mack Bros. Motor Car Company
ROY D. CHAPIN.....	Hudson Motor Car Company
J. D. MOONEY.....	General Motors Corporation

## REPRESENTATIVES ON NATIONAL INDUSTRIAL CONFERENCE BOARD

A. J. BROSEAU.....	Mack Bros. Motor Car Company
ALFRED H. SWAYNE.....	General Motors Corporation

## INFORMATION DEPARTMENT

STEPHEN D. BRYCE, JR., *Manager*

## STATISTICAL DEPARTMENT

O. P. PEARSON, *Manager*

## DETROIT OFFICE

KENNETH A. MOORE

## PARIS OFFICE

JOHN V. LAWRENCE

## WASHINGTON OFFICE

PYKE JOHNSON



# Members of National Automobile Chamber of Commerce

## Passenger Car Manufacturers

Trade Name	Member or Manufacturer	Address
Auburn.....	Auburn Automobile Company.....	Auburn, Ind.
Buick.....	Buick Motor Company.....	Flint, Mich.
Cadillac.....	Cadillac Motor Car Company.....	Detroit, Mich.
Chevrolet.....	Chevrolet Motor Company.....	Detroit, Mich.
Chrysler.....	Chrysler Sales Corporation.....	Detroit, Mich.
Cord.....	Auburn Automobile Company.....	Auburn, Ind.
Cunningham.....	Jas. Cunningham Son & Company.....	Rochester, N. Y.
De Soto.....	De Soto Motor Corporation.....	Detroit, Mich.
Dodge Brothers.....	Dodge Brothers Corporation.....	Detroit, Mich.
Duesenberg.....	Duesenberg, Inc.....	Indianapolis, Ind.
duPont.....	duPont Motors, Inc.....	Springfield, Mass.
Essex.....	Hudson Motor Car Co.....	Detroit, Mich.
Franklin.....	H. H. Franklin Manufacturing Co.....	Syracuse, N. Y.
Graham.....	Graham-Paige Motors Corporation.....	Detroit, Mich.
Hudson.....	Hudson Motor Car Company.....	Detroit, Mich.
Hupmobile.....	Hupp Motor Car Corporation.....	Detroit, Mich.
Jordan.....	Jordan Motor Car Company.....	Cleveland, Ohio
LaSalle.....	Cadillac Motor Car Company.....	Detroit, Mich.
Lincoln.....	Lincoln Motor Company.....	Detroit, Mich.
Marmon.....	Marmon Motor Car Company.....	Indianapolis, Ind.
Nash.....	The Nash Motors Company.....	Kenosha, Wis.
Oldsmobile.....	Olds Motor Works.....	Lansing, Mich.
Packard.....	Packard Motor Car Company.....	Detroit, Mich.
Peerless.....	The Peerless Motor Company.....	Cleveland, Ohio
Pierce-Arrow.....	The Pierce-Arrow Motor Car Company.....	Buffalo, N. Y.
Plymouth.....	Plymouth Motor Corporation.....	Detroit, Mich.
Pontiac.....	Pontiac Motor Company.....	Pontiac, Mich.
Reo.....	Reo Motor Car Company.....	Lansing, Mich.
Rockne.....	Rockne Motors Corporation.....	Detroit, Mich.
Studebaker.....	The Studebaker Corporation.....	South Bend, Ind.
Stutz.....	Stutz Motor Car Co. of America, Inc.....	Indianapolis, Ind.
Willys-Overland.....	The Willys-Overland Company.....	Toledo, Ohio

*(Membership list continued on following page)*

## Members of National Automobile Chamber of Commerce (Continued)

### Motor Truck Manufacturers

Trade Name	Member or Manufacturer	Address
Autocar	The Autocar Company	Ardmore, Pa.
Chevrolet	Chevrolet Motor Company	Detroit, Mich.
Corbitt	The Corbitt Company	Henderson, N. C.
Diamond T	Diamond T Motor Car Company	Chicago, Ill.
Dodge Brothers	Graham Brothers (Div. of Chrysler Corporation)	Detroit, Mich.
Dover	Hudson Motor Car Company	Detroit, Mich.
Duplex	Duplex Truck Company	Lansing, Mich.
Fageol	Fageol Motors Company	Oakland, Calif.
Federal	Federal Motor Truck Company	Detroit, Mich.
Garford	Relay Motors Corporation	Lima, Ohio
G. M. C.	General Motors Truck Corporation	Pontiac, Mich.
International	International Harvester Company	Chicago, Ill.
Kleiber	Kleiber Motor Company	San Francisco, Calif.
LaFrance-Republic	LaFrance-Republic Corporation	Alma, Mich.
Maccar	Maccar Truck Company	Scranton, Pa.
Mack	Mack Brothers Motor Car Co.	New York, N. Y.
Moreland	Moreland Motor Truck Company	Los Angeles, Calif.
Paige	Graham-Paige Motors Corp.	Detroit, Mich.
Pierce-Arrow	S. P. A. Truck Corporation	Buffalo, N. Y.
Relay	Relay Motors Corporation	Lima, Ohio
Reo	Reo Motor Car Company	Lansing, Mich.
Rockne	Rockne Motors Corporation	Detroit, Mich.
Schacht	The LeBlond-Schacht Truck Co.	Cincinnati, Ohio
S. P. A.	S. P. A. Truck Corporation	South Bend, Ind.
Sterling	Sterling Motor Truck Company	Milwaukee, Wis.
Stewart	Stewart Motor Corporation	Buffalo, N. Y.
Studebaker	S. P. A. Truck Corporation	South Bend, Ind.
Walker	Walker Vehicle Co.	Chicago, Ill.
Walter	Walter Motor Truck Company	Long Island City, N. Y.
Ward	Ward Motor Vehicle Company	Mt. Vernon, N. Y.
White	The White Motor Company	Cleveland, Ohio
Willys-Overland	The Willys-Overland Company	Toledo, Ohio

### Taxicab Manufacturers

Checker	Checker Cab Mfg. Corp.	Kalamazoo, Mich.
Dodge Brothers	Dodge Brothers Corporation	Detroit, Mich.
Yellow Cab	General Motors Truck Corporation	Pontiac, Mich.

(Membership list continued on following page)

## Members of National Automobile Chamber of Commerce (Continued)

### Motor Bus Manufacturers

Trade Name	Member or Manufacturer	Address
Corbitt	The Corbitt Company	Henderson, N. C.
Fageol	Fageol Motors Corporation	Oakland, Calif.
Fargo	Chrysler Motors	Detroit, Mich.
Garford	Relay Motors Corporation	Lima, Ohio
International	International Harvester Company	Chicago, Ill.
Mack	Mack Brothers Motor Car Co.	New York, N. Y.
Relay	Relay Motors Corporation	Lima, Ohio
Reo	Reo Motor Car Company	Lansing, Mich.
Studebaker	S. P. A. Truck Corporation	South Bend, Ind.
White	The White Motor Company	Cleveland, Ohio
Yellow	General Motors Truck Corporation	Pontiac, Mich.

### Ambulance and Funeral Vehicle Manufacturers

Cadillac	Cadillac Motor Car Company	Detroit, Mich.
Cunningham	Jas. Cunningham Son & Company	Rochester, N. Y.
Studebaker	S. P. A. Truck Corporation	South Bend, Ind.

### Motor Fire Apparatus Manufacturers

Corbitt	The Corbitt Company	Henderson, N. C.
Mack	Mack Brothers Motor Car Co.	New York, N. Y.
White	The White Motor Company	Cleveland, Ohio

## Associations of the Automobile Industry

### National Automobile Association

NATIONAL HEADQUARTERS: Pennsylvania Avenue at 17th Street, N. W., Washington, D. C.

PRESIDENT: Thos. P. Henry, 41 Burroughs Avenue, Detroit, Mich.

EXECUTIVE VICE-PRESIDENT: Ernest N. Smith, Washington, D. C.

GENERAL MANAGER: C. P. Clark.

The A. A. A. was organized in Chicago in March, 1902. It is now the world's largest motor federation—composed of 1,000 motor clubs throughout the country and approximately 900,000 members. It is a national civic body, operating without personal profit and officered by responsible business and professional men.

**OBJECTS:** Its objects, briefly stated, are:

To unite in one body all the automobile clubs and individual motorists in the country.

To secure reasonable and just legislation and to aid in proper enforcement of automobile laws and ordinances.

To obtain local, state and federal aid in the construction and maintenance of good roads.

To encourage travel by automobile, bus, steamship and air, and to secure, prepare, and disseminate information relative thereto.

To support sportsmanlike contests and other movements that will advance motoring interests.

To develop service to motorists through clubs.

To promote highway safety by motorists and pedestrians, and to develop it among children through safety lessons and school boy patrol.

To facilitate touring by Americans in foreign countries, furnish customs papers, driving licenses and necessary documents.

### National Association of Motor Bus Operators

PRESIDENT: A. M. Hill, 601 Virginia St., Charleston, W. Va.

VICE-PRESIDENT: R. T. Whiting, 300 Central Terminal Bldg., Seattle, Wash.

SECRETARY-MANAGER: John M. Meighan, 823 Tower Building, Washington, D. C.

The National Association of Motor Bus Operators, now in the sixth year of its existence as the national trade association of motor bus owners and operators, was formally organized early in 1926 as the Motor Bus Division of the American Automobile Association. In 1929 the name was officially changed to the National Association of Motor Bus Operators, and in 1931 the Association was incorporated under this name. While the Association maintains separate quarters the affiliation with the American Automobile Association continues as before.

Membership in the National Association of Motor Bus Operators is open to all operators of motor buses, to state associations of motor bus operators, and to manufacturers, distributors and other persons, firms, or corporations having dealings of a general nature with operator members of the Association.

All activities that promote the welfare and prosperity of motor bus operators and of the bus industry as a whole are within the scope of the Association's program. These include national, state and municipal legislation, important litigation, the collection and dissemination of bus operating cost and tax data, and the distribution to the public of facts on the economy and convenience of bus travel.

(Association list continued on following page)

# Associations of the Automobile Industry

## National Automobile Chamber of Commerce

**GENERAL OFFICES:** Marlin-Rockwell Building, 366 Madison Avenue, at 46th Street, New York, N. Y. Offices at Detroit, Washington and Paris.

**PRESIDENT:** Alvan Macauley, President of Packard Motor Car Company.

**GENERAL MANAGER:** Alfred Reeves. The National Automobile Chamber of Commerce is the successor of the National Association of Automobile Manufacturers, organized in November, 1900, and of the Automobile Board of Trade.

**OBJECT:** To serve as a clearing house of research and information on subjects concerning motor transportation, and to represent the automobile industry in all matters where cooperative effort is proper, efficient, and economical.

Its purposes may be illustrated by listing some of its current activities, which are directed by the committee members:

Cross-licenses more than 1700 patents. Manages New York and Chicago National Automobile Shows.

Conducts researches on all matters related to automobile industry.

Studies railroad rates, and appears in rate cases for automobile industry.

Publishes "Facts and Figures of the Automobile Industry," and numerous special studies on motor transport topics.

Advocates improved highways located according to economic needs.

Maintains regional information offices in Detroit, Washington and Europe.

Provides lecturers on motor transportation in all parts of the world.

Acts as contact for the automobile industry with insurance rate makers.

Promotes development of motor car, motor truck, motor bus, and taxicab transportation.

Conducts Motor Truck Educational Bureau which does research and distributes information on driver training, sound taxation principles, management and other phases of commercial transport. In this connection, maintains a speakers' bureau.

Fosters state and local organizations of truck owners.

Advocates sound and equitable legislative principles.

Conducts advertising conventions for exchange of views on improved practices, desirable standards, and economies.

Acts as a clearing house for activities encouraging worldwide use of motor transport.

Numbers of makes of vehicles produced by members: passenger cars, 32; motor trucks, 32; taxicabs, 3; buses, 11; special vehicles, such as fire, ambulances, 6.

## Motor and Equipment Manufacturers Association

**EXECUTIVE HEADQUARTERS:** Fisk Building, 250 West 57th Street, New York.

**PRESIDENT:** George L. Brunner, Brunner Manufacturing Co., Utica, N. Y.

**GENERAL MANAGER:** Albert H. Eichholz, Fisk Building, New York, N. Y.

National organization, representing interests of manufacturers of raw materials; machinery; tools; motors; automotive, aircraft and marine accessories, parts and equipment; mechanical and electrical devices. Maintains credit, sales development, export, trade and national shows, legislation and group activities departments.

## Motor and Equipment Wholesalers Association

**EXECUTIVE HEADQUARTERS:** Daily News Bldg., 400 W. Madison St., Chicago, Ill.

**PRESIDENT:** E. T. Satchell, Motor Accessories Co., Allentown, Pa.

**GENERAL MANAGER:** B. W. Ruark, 400 W. Madison St., Chicago, Ill.

National organization representing interests of automotive jobbers, distributing merchandise generally as follows: Parts, equipment, accessories, and supplies in the automotive, aircraft and marine line.

Association maintains an information bureau for members and disseminates information pertinent to operations of the automotive jobbing industry.

Also conducts a Collection Service and Adjustment Bureau, and a Merchandise Exchange Department.

Through seventeen regional association groups correlates jobber opinion on matters of trade interest and conducts a continuous national information distribution service through means of regional key line distribution charts.

## Rubber Manufacturers Association, Incorporated

**GENERAL OFFICES:** 250 West 57th Street, New York City.

**PRESIDENT:** J. D. Tew.

**GENERAL MANAGER:** A. L. Viles.

A national trade organization embracing rubber manufacturers of the United States.

Its membership consists of 100 firms, and its object is to promote in all lawful ways the commercial interests of its members, and secure the advantages to be obtained through mutual co-operation, also to stimulate social intercourse among those connected with the rubber industry and commerce and in general for the promotion of the welfare of the rubber industry.

## Associations of Automobile Industry (Continued)

### Society of Automotive Engineers, Inc.

GENERAL OFFICES: 29 West 39th Street, New York City.

PRESIDENT: A. J. Scaife, Cleveland, Ohio.

SECRETARY AND GENERAL MANAGER: John A. C. Warner.

OBJECT of the Society is to promote the arts, sciences, standards, and engineering practices connected with the design, construction and utilization of automotive apparatus, of all forms of self-propelled or mechanically propelled mediums for the transportation of passengers or freight, and internal combustion prime-movers. Publications are: *Transactions* (annual); *S. A. E. Membership Roster* (annual); *The S. A. E. Journal* (monthly); and *S. A. E. Handbook*, including *Standards and Recommended Practices* (revised semi-annually). Over 600 distinct mechanical and material standards, specifications, mounting dimensions of parts and accessories have been established by S. A. E. Membership over 7,000.

### National Standard Parts Association

GENERAL OFFICES: 1304 Eaton Tower, Detroit, Mich.

PRESIDENT: V. W. Olson, Automotive Service Co., 1222 Harmon Place, Minneapolis, Minn.

EXECUTIVE VICE-PRESIDENT: E. P. Chalfant, 1304 Eaton Tower, Detroit, Mich.

MEMBERSHIP comprises corporations, firms or persons engaged in manufacturing and of jobbing standard brands of automotive service parts, shop tools and equipment.

OBJECTS: The objects of the Association are to promote an enlarged acquaintance and a more friendly intercourse among its members and in all reasonable, lawful and proper ways to promote the best interests of the automotive service parts trade.

### Motor Vehicle Conference Committee

OFFICES: Marlin-Rockwell Building, 366 Madison Avenue at 46th Street, New York City.

CHAIRMAN: D. C. Fenner.

SECRETARY: Richard S. Armstrong.

The Motor Vehicle Conference Committee, organized in 1919, is composed of representatives from the following organizations: American Automobile Association, Motor and Equipment Manufacturers Association, National Automobile Chamber of Commerce, National Automobile Dealers Association, The Rubber Manufacturers Association, Society of Automotive Engineers, and the National Association of Motor Bus Operators.

This Committee acts as a clearing house for the legislative problems which, in increasing numbers, are confronting the individual members of its component organizations.

### National Association of Finance Companies

GENERAL OFFICES: 333 N. Michigan Avenue, Chicago, Ill.

PRESIDENT: Victor L. Brown, Milwaukee, Wis.

SECRETARY AND GENERAL MANAGER: C. C. Hanch.

OBJECTS: Coordination of forces for educational, legislative, and other purposes, generally cooperative with allied interests. A national organization representing automotive financing and insuring interests along the following lines: Advocates sound

credit terms. Defends installment selling. Opposes vicious state and national legislation and promotes desirable legislation. Distributes valuable data in the shape of educational, legal, statistical, and production bulletins and briefs. Secures material reduction in cost of essential services used by members. Arranges for interchange of service between members in collection and credit work and location of seized and embezzled motor vehicles.

### American Motorists Association

ADMINISTRATIVE OFFICES: 1014-17th Street, N. W., Washington, D. C.

PRESIDENT: J. Borton Weeks, 260 North Broad St., Philadelphia, Pa.

GENERAL MANAGER: Thomas J. Keefe, 1014-17th St., N. W., Washington, D. C.

The A.M.A. was organized in August 1927 and incorporated in Delaware as a non-profit service organization. Membership nearly 300,000.

OBJECTS are to aid in the organization and maintenance of automobile associations and clubs to promote the welfare of motorists; to compile and distribute information on touring, roads and laws; to promote good roads, safety on the highway, in short, any and all activities in the interest of motorists.

### National Automobile Dealers Association

GENERAL OFFICES: 75 East Wacker Drive, Chicago, Ill.

PRESIDENT: Floris Nagelvoort, Seattle, Wash.

SECRETARY AND GENERAL MANAGER: C. A. Vane.

OBJECT is promotion of automobile dealer business, constructive publicity on dealer aims, maintenance of high merchandising standards, research on the magnitude of the business, study of markets and dissemination of facts concerning the same, opposition to harmful legislation, support of good legislation, promotion of good roads.

### National Association of Taxicab Owners

HEADQUARTERS: 500 North Dearborn Street, Chicago, Ill.

PRESIDENT: W. W. Cloud, Baltimore, Md.

SECRETARY: J. G. Williams, Chicago, Ill.

#### PURPOSES

To afford our members a medium of cooperation. To collect and disseminate information that promotes the economical conduct of the taxicab business.

To establish and maintain cordial relations with the public.

To strive for safety on the highways.

### National Association of Automobile Show and Association Managers

GENERAL OFFICES: Chestnut and 56th Streets, Philadelphia, Pa.

PRESIDENT: Robert E. Lee, St. Louis, Mo.

A National Association composed of managers of local automobile dealer associations, and of automobile shows sponsored by these local organizations.

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